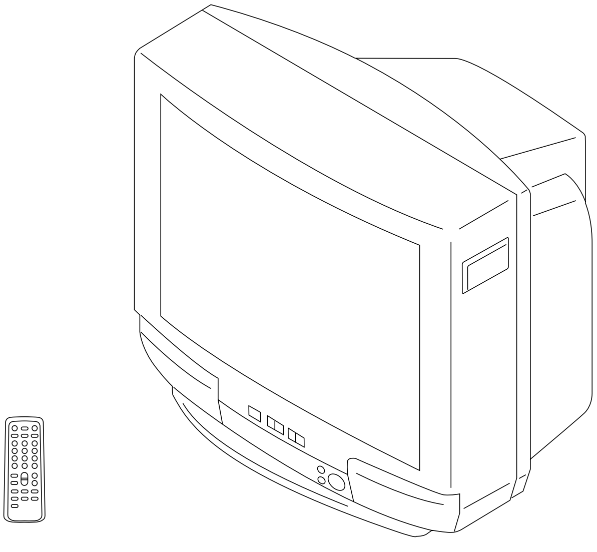
SERVICE MANUAL BG-1S (D) CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-G21PD1	RM-883	India	SCC-K67E-A				



MICROFILM

TRINITRON ® COLOR TV

SONY®

SPECIFICATIONS

		Note
Power requirements	110-240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G	
Color system	PAL, PAL 60, NTSC4.43, NTSC3.58 (AV IN)	
Channel coverage	VHF: E2 to E12/UHF: E21 to E69/CATV: S01 to S03, S1 to S41	
Audio output (speaker)	3W	
Inputs	Antenna: 75 ohms	
	VIDEO IN jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500mVrms, high impedance	
Outputs	Earphone jack: minijack	
	MONITOR OUT jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms	
Picture tube	21 in.	
Tube size (cm)	54	Measured diagonally
Screen size (cm)	51	Measured diagonally
Dimensions (w/h/d, mm)	527 × 464 × 471	
Mass (kg)	22	

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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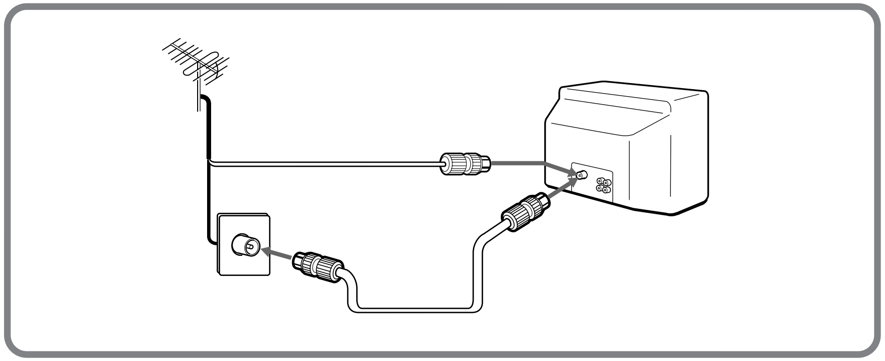
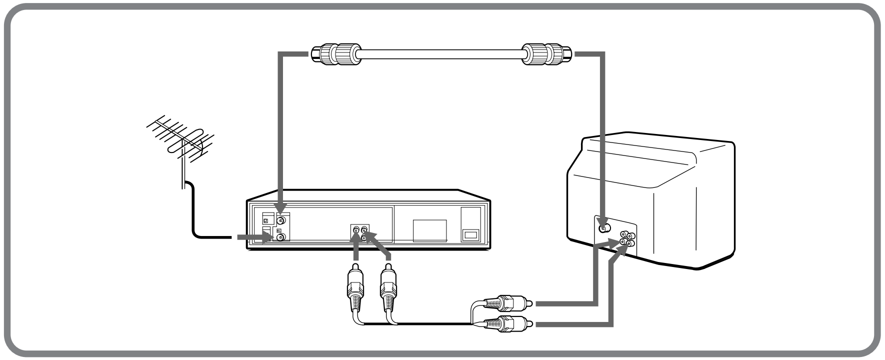
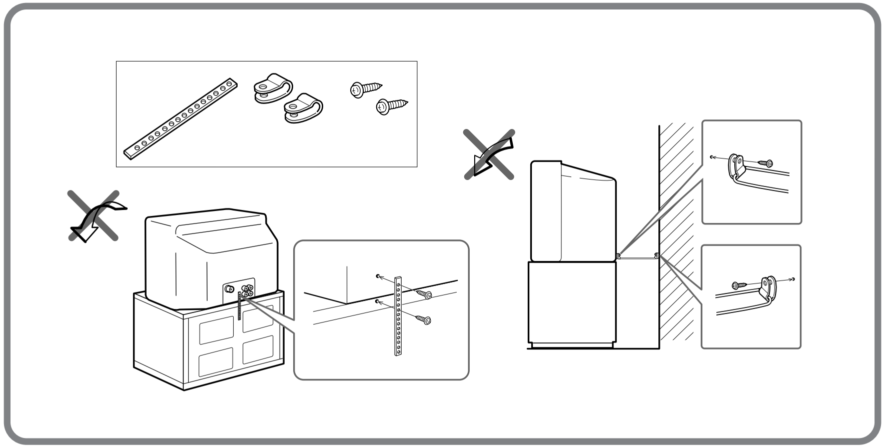
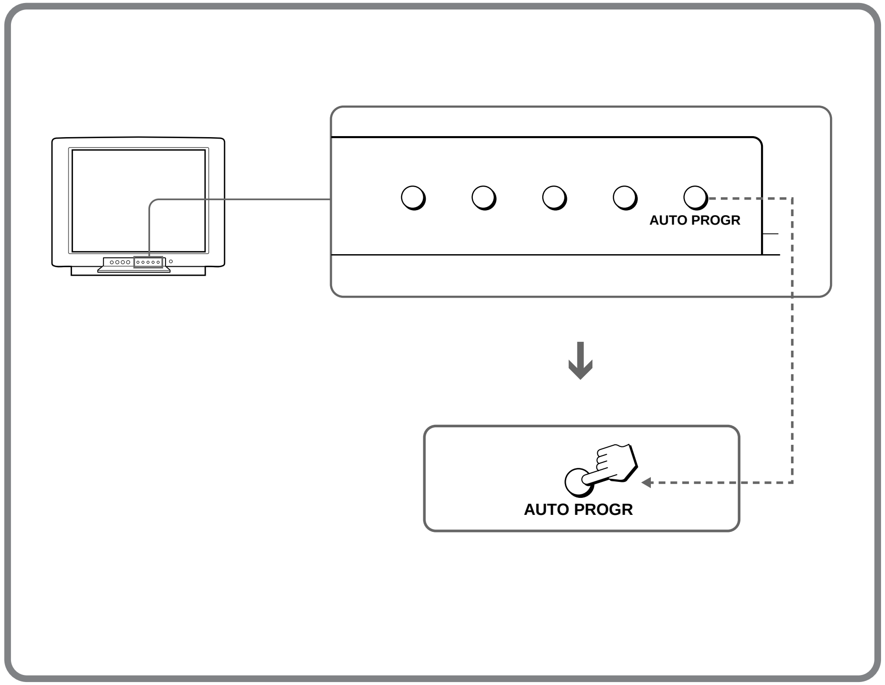
SECTION 1
GENERAL

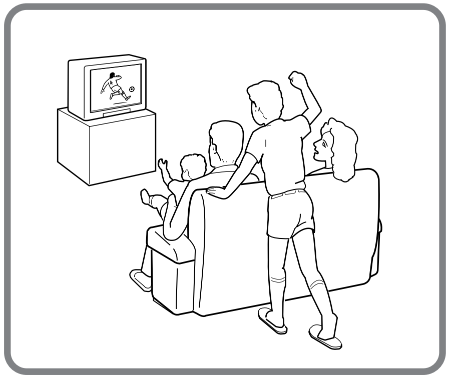
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

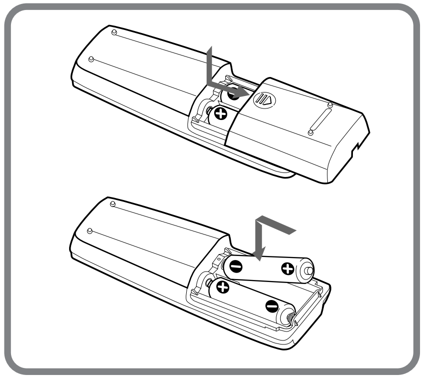








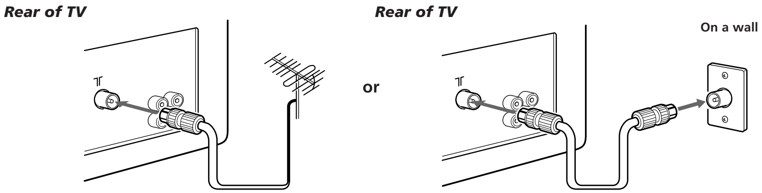




Connections

Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

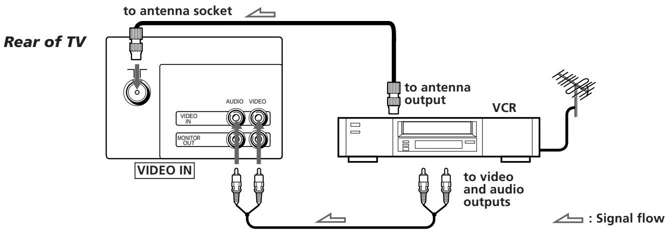
Attach an optional IEC antenna connector to the 75-ohm coaxial cable.
Plug the connector into the ╥ (antenna) socket at the rear of the TV.

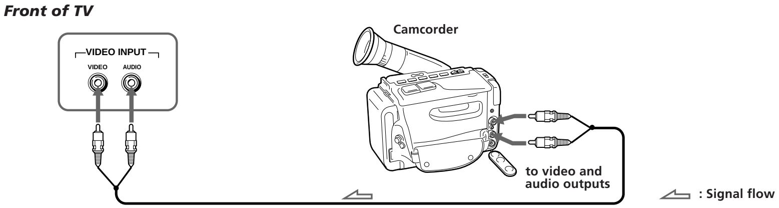

Rear of TV
or
Rear of TV
On a wall

Connecting optional equipment

You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game or stereo system.

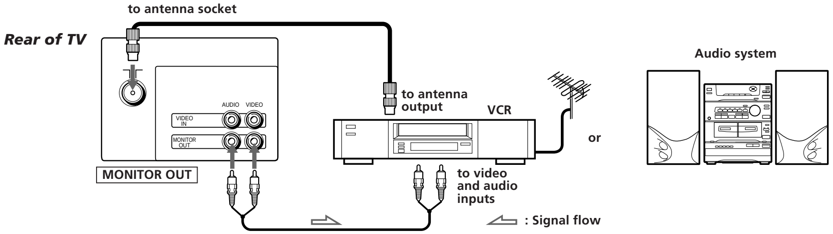
Connecting video equipment using video input jacks


to antenna socket
Rear of TV
AUDIO
VIDEO
VIDEO IN
MONITOR OUT
VIDEO IN
to antenna output
VCR
to video and audio outputs
: Signal flow


Front of TV
VIDEO INPUT
VIDEO
AUDIO
Camcorder
to video and audio outputs
: Signal flow

When using the video input jacks
Do not connect video equipment to the video input jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.

Connecting audio/video equipment using MONITOR OUT jacks


to antenna socket
Rear of TV
AUDIO
VIDEO
VIDEO IN
MONITOR OUT
MONITOR OUT
to antenna output
VCR
or
Audio system
to video and audio inputs
: Signal flow

When recording through the MONITOR OUT jacks
If you change the channel or video input while recording with a VCR, the channel or video input you are recording also will be changed.

Presetting channels

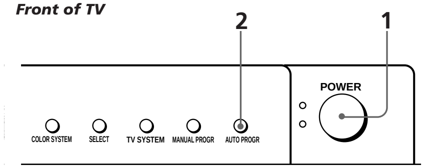
You can preset up to 100 TV channels in numerical sequence from program position 1 automatically.

To change the channel for a particular program position or to receive a channel with a weak signal, you can preset the channel manually. You can also disable program position.

You can preset TV channels using the buttons on the TV or the remote commander.

Presetting channels automatically using the buttons on the TV

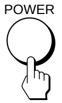
Front of TV



Note

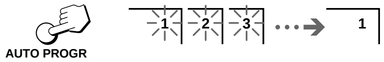
- TV SYSTEM button is not used for this model.

1 Press POWER to turn on the TV.



When the TV is turned on in standby mode, press POWER on the remote commander.

2 Press AUTO PROGR.



To start presetting channels automatically from the specified program position

1. Press MANUAL PROGR.
2. Press PROGR +/– to select the program position.
3. Press AUTO PROGR.

Presetting channels manually using the buttons on the TV

1 Press MANUAL PROGR.

2 Press PROGR +/– on the remote commander until the required program position appears on the screen.

3 Press VOLUME +/– until the required channel picture appears on the screen.

4 Press MANUAL PROGR.

Disabling program positions using the buttons on the TV

By disabling unused or unwanted program positions, you can skip those positions when you press PROGR +/– on the remote commander.

1 Press PROGR +/– on the remote commander until the unused or unwanted program position appears on the screen.

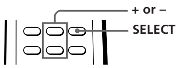
2 Press MANUAL PROGR.

3 Press PIC MODE on the remote commander.

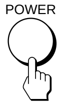
4 Press MANUAL PROGR.

To cancel the skip setting
Preset the channel manually or automatically again.

Presetting channels automatically using the remote commander

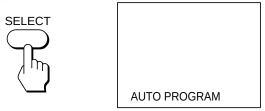


1 Press POWER to turn on the TV.

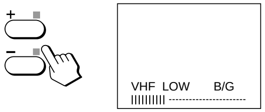


When the TV is turned on in standby mode, press POWER on the remote commander.

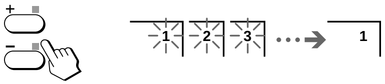
2 Press SELECT until “AUTO PROGRAM” appears.



3 Press + or – .

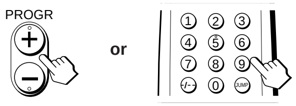


4 Press + or – .

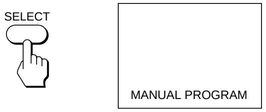


Presetting channels manually using the remote commander

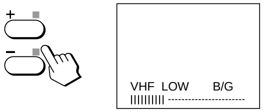
1 Press PROGR +/– or a number button until the required program appears on the screen.



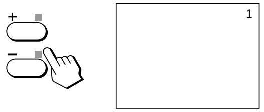
2 Press SELECT until “MANUAL PROGRAM” appears.



3 Press + or – .

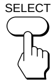


4 Press + or – .



The selected channel appears on the screen.

5 Press SELECT to return to normal screen.



If you are not satisfied with the picture and sound quality

You may be able to further improve the picture and sound quality by using fine tuning as below:

1 Select the program position you want to adjust.

2 Press SELECT until “MANUAL PROGRAM” appears on the screen.

3 Press + or – on the remote commander once.

4 Press DISP until “FINE” appears on the screen.

5 Press + or – continuously until you are satisfied with the picture and sound quality.

6 Press SELECT to return to normal screen.

Watching the TV

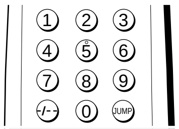
1 **Press POWER to turn on the TV.**

When the TV is turned on in standby mode, press POWER on the remote commander.

2 **Select the TV program you want to watch.**

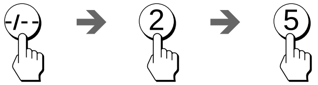
To select a program position directly

Press the number button.


1
2
3
4
5
6
7
8
9
-/--
0
JUMP

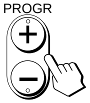
To select a two-digit program position, press “-/--” before pressing the number buttons.

For example: to select program position 25, press “-/--,” and then “2” and “5.”

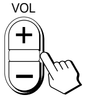


To scan through program positions

Press PROGR +/– until the program position you want appears.



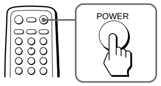
3 **Press VOL +/– to adjust the volume.**



Turning off the TV

To turn off the TV temporarily

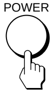
Press POWER on the remote commander. The STANDBY indicator on the TV lights up.



To turn off the TV completely

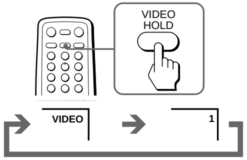
Press POWER on the TV.

If the power on the TV is turned off in standby mode, the STANDBY indicator on the TV may remain alight for a while.



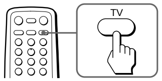
Watching the video input

Press VIDEO/HOLD.


VIDEO
HOLD
VIDEO
1

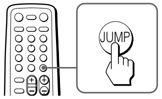
To watch TV

Press TV.



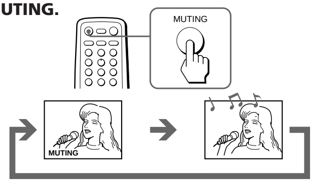
Switching back quickly to the previous channel

Press JUMP.



Muting the sound

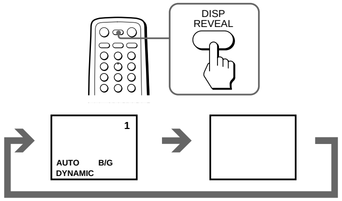
Press MUTING.


MUTING
MUTING

Displaying on-screen information

Press DISP/REVEAL.

The program position, local system, and TV settings are displayed on the screen.

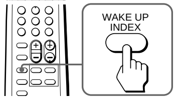

DISP
REVEAL
1
AUTO
B/G
DYNAMIC

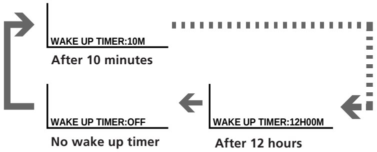
Setting the Wake Up Timer

You can set the TV to automatically turn on as you have programmed.

1 **Press WAKE UP/INDEX repeatedly to set the timer.**

The on-screen display appears and the WAKE UP indicator on the TV lights up.


WAKE UP
INDEX


WAKE UP TIMER:10M
After 10 minutes
WAKE UP TIMER:12H00M
After 12 hours
WAKE UP TIMER:OFF
No wake up timer

2 **If you want a particular TV program or video input to be displayed using the Wake Up Timer, select the TV program or video input.**

3 **Press POWER on the remote commander or set the Sleep Timer to turn off the TV in standby mode.**

To cancel the Wake Up Timer, press WAKE UP/INDEX repeatedly until “WAKE UP TIMER: OFF” appears, or turn off the main power of the TV.

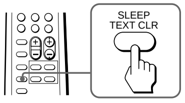
Notes

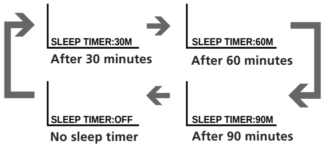
- The Wake Up Timer starts immediately after the on-screen display disappears.
- The last TV program position or video input just before the TV turns into standby mode will appear when the TV is turned on using the Wake Up Timer.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into standby mode. If you want to continue watching the TV, press any button or control on the remote commander or the TV.

Setting the Sleep Timer

You can set the TV to automatically turn off as you have programmed.

Press SLEEP/TEXT CLR.

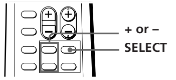

SLEEP
TEXT CLR


SLEEP TIMER:30M
After 30 minutes
SLEEP TIMER:60M
After 60 minutes
SLEEP TIMER:90M
After 90 minutes
SLEEP TIMER:OFF
No sleep timer

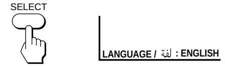
To cancel the Sleep Timer, press SLEEP/TEXT CLR repeatedly until “SLEEP TIMER: OFF” appears, or turn off the TV.

Changing the on-screen display language

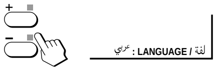
You can use buttons on the remote commander or the TV to change the on-screen display language.



1 **Press SELECT until the screen appears as follows:**


SELECT
LANGUAGE / لغة : ENGLISH

2 **Press + or – to select “عربي”.**

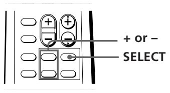

+
–
عربي : LANGUAGE / لغة

Note

- You can also use SELECT and VOLUME +/– on the TV to select the on-screen display language.

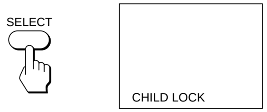
Using the Child Lock feature

You can prevent a child from watching certain program positions by using the buttons on the remote commander.

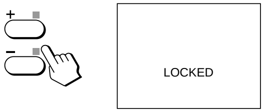


1 **Select the TV program you want to lock.**

2 **Press SELECT until “CHILD LOCK” appears on the screen.**


SELECT
CHILD LOCK

3 **Press + or – until “LOCKED” appears on the screen.**



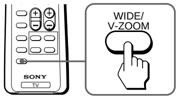
Notes

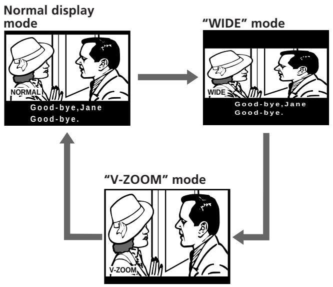
- To unlock the program position, repeat steps 1 to 3 as above until “LOCKED” disappears from the screen.
- To prevent your child from unlocking the program position, keep the remote commander away from your child.

Watching the picture in wide mode

You can adjust the display mode accordingly to fit the programs to your TV screen size.

Press WIDE/V-ZOOM repeatedly until the wide display mode you want appears on the screen.

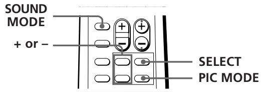

WIDE/
V-ZOOM
SONY


Normal display mode
“WIDE” mode
“V-ZOOM” mode
NORMAL
Good-bye,Jane
Good-bye.
WIDE
Good-bye,Jane
Good-bye.
V-ZOOM

Adjusting the picture

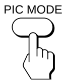
Note on the SOUND MODE button

- The sound mode feature is unavailable for your TV. Thus, the SOUND MODE button on the remote commander is not used for your TV.

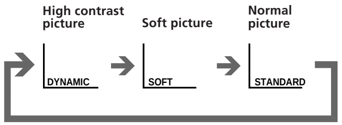

SOUND MODE
+ or –
SELECT
PIC MODE

Selecting the picture mode

Press PIC MODE until the mode you want appears.



Each time you press PIC MODE, the screen changes as follows:

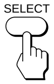

High contrast picture
Soft picture
Normal picture
DYNAMIC
SOFT
STANDARD

Note

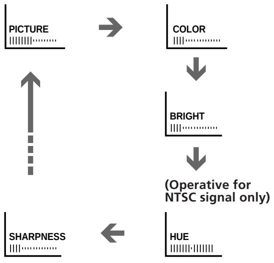
- If you change the picture mode after the following adjustments, the adjustment changes in accordance with the picture mode.

Adjusting the picture setting

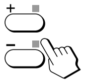
1 **Press SELECT until the item you want to adjust appears.**



Each time you press SELECT, the screen changes as follows:


PICTURE
COLOR
BRIGHT
(Operative for NTSC signal only)
HUE
SHARPNESS

2 **Press + or – to adjust the item.**

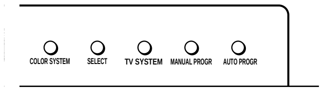


3 **To adjust other items, repeat steps 1 and 2.**

Note

- You can also use SELECT and VOLUME +/– on the TV to adjust the picture setting.

Front of TV


COLOR SYSTEM
SELECT
TV SYSTEM
MANUAL PROGR
AUTO PROGR

If the picture color is abnormal when receiving programs through the ╥ (antenna) terminal
Change the “COLOR SYSTEM” setting or adjust the “COLOR” level in the on-screen display until the color becomes normal.

If the picture color is abnormal when receiving programs through the video input jack
Change the “COLOR SYSTEM” setting or adjust the “COLOR” level in the on-screen display until the color becomes normal.

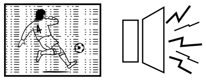
Note

- Normally set “COLOR SYSTEM” to “AUTO”.

Troubleshooting

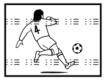
If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.
If the problem persists, contact your nearest authorized service center or dealer.

Snowy picture
Noisy sound



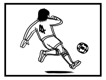
➡Check the antenna.
➡Check the antenna connection on the TV and on the wall.

Dotted lines or stripes



➡This may be caused by local interference (e.g. cars, neon signs and hair dryers). Adjust the antenna for minimum interference.

Double images or "ghosts"

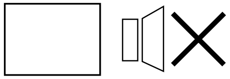


➡This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.

No color

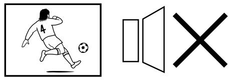
➡Adjust the COLOR level in the on-screen display.
➡Check the COLOR SYSTEM setting.

No picture
No sound



➡Press POWER.
➡Check the antenna connection.
➡Check the VCR connections.
➡Check the power cord connection.
➡Check the standby mode.

Good picture
No sound



➡Press VOLUME +.
➡Press MUTING.

TV cabinet creaks

➡Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

Note on the remote commander

- The supplied remote commander is used on several models of the TV. If you do not find instructions for some controls that are on the remote commander, that means your TV does not employ the features of those controls, e.g. TEXT.

Note on the TV SYSTEM button

- The TV SYSTEM button is not used on your TV.

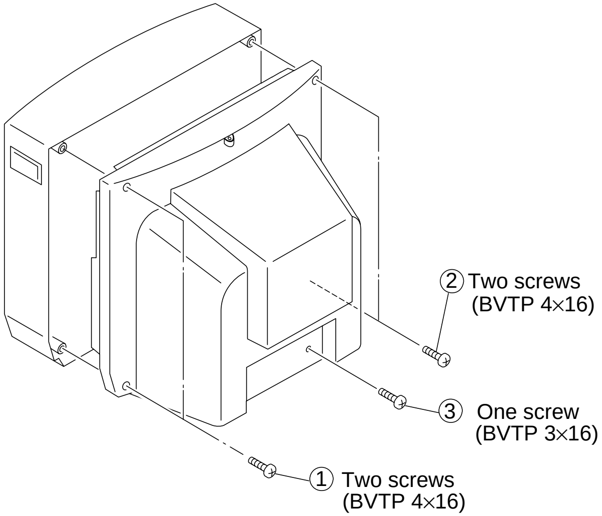
Notes

- When you switch on the TV, you may hear the "boon" sound that is caused by the demagnetization of the TV. This does not indicate a malfunction.
- The picture color may become abnormal if you change the direction of your TV. To obtain the normal picture color, press POWER on the TV to switch off the TV for five minutes and then switch it on again.

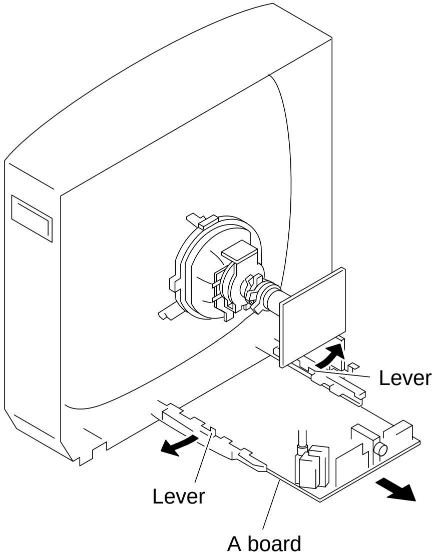
WARNING
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

SECTION 2
DISASSEMBLY

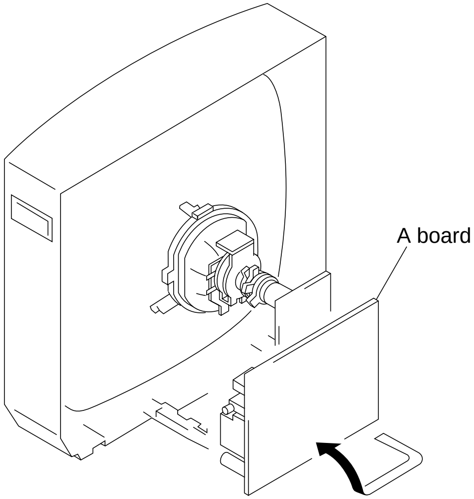
2-1. REAR COVER REMOVAL


② Two screws
(BVTP 4×16)
③ One screw
(BVTP 3×16)
① Two screws
(BVTP 4×16)

2-2. A BOARD REMOVAL


Lever
Lever
A board

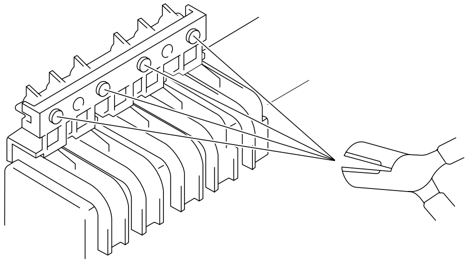
2-3. SERVICE POSITION

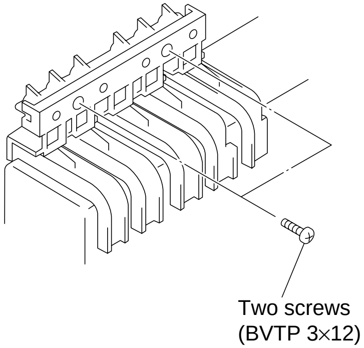


2-4. REPLACEMENT OF PARTS

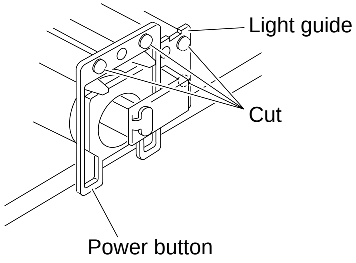
For replacement of the Multi Button, Light Guide and Power Button, cut the welded portions from them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

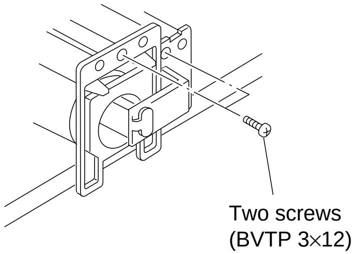
2-4-1. REPLACEMENT OF MULTI BUTTON



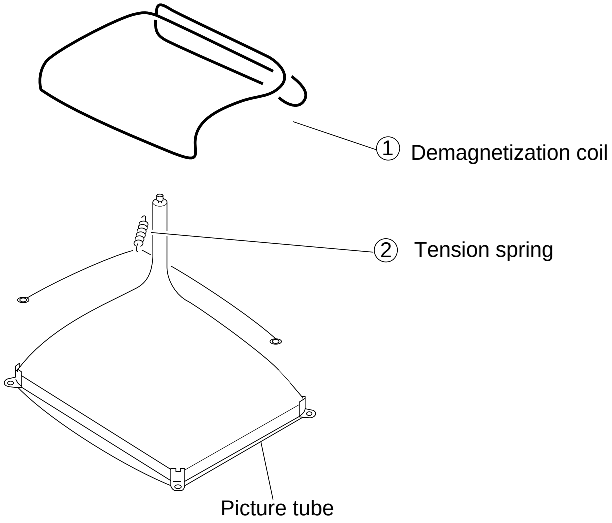

Two screws
(BVTP 3×12)

2-4-2. REPLACEMENT OF LIGHT GUIDE AND POWER BUTTON

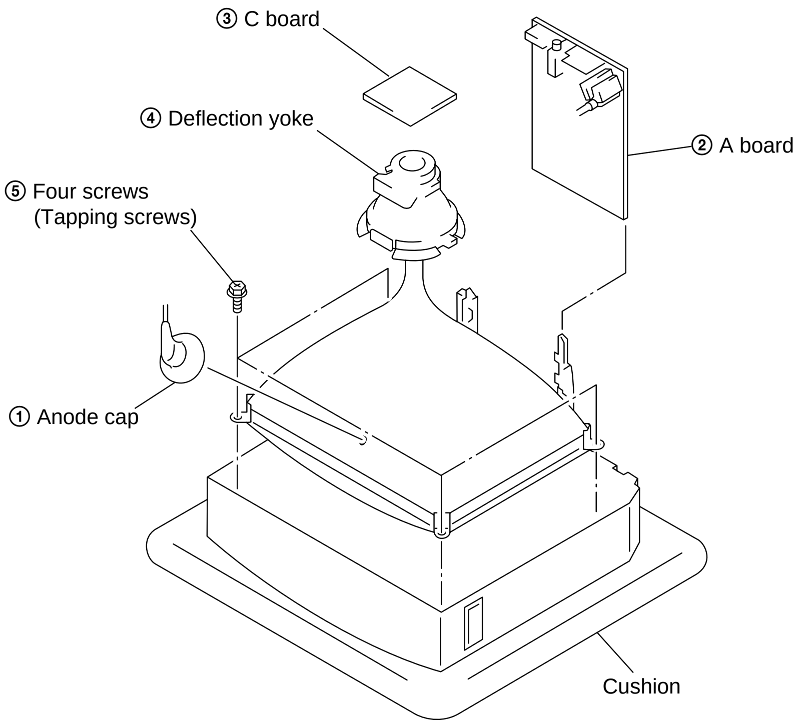

Light guide
Cut
Power button


Two screws
(BVTP 3×12)

2-5. DEMAGNETIZATION COIL REMOVAL


① Demagnetization coil
② Tension spring
Picture tube

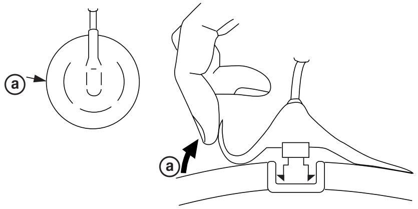
2-6. PICTURE TUBE REMOVAL



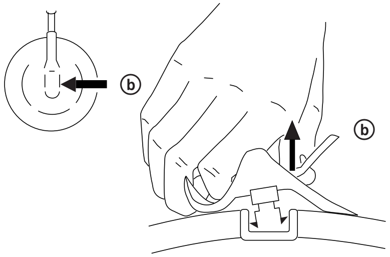
•REMOVAL OF ANODE-CAP

NOTE : After removing the anode short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

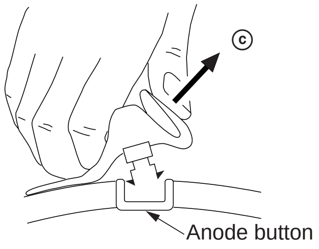
•REMOVING PROCEDURES



① **Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.**



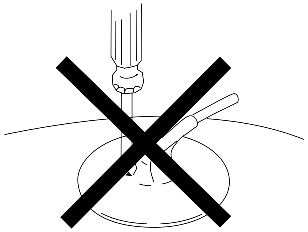
② **Using a thumb press down then pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.**

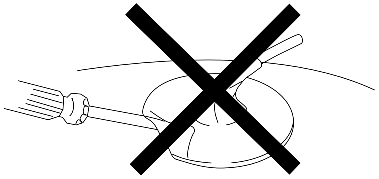


③ **When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.**

• HOW TO HANDLE AN ANODE-CAP

① **Do not damage the surface of anode-caps with sharp shaped objects**
② **Do not press the rubber too hard so as not to damage the inside of anode-caps**
A metal fitting called the shatter-hook terminal is built into the rubber.
③ **Do not turn the foot of rubber over too hard**
The shatter-hook terminal will stick out or damage the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:
PICTURE control .... normal
BRIGHTNESS control .... normal

Perform the adjustments in the following order

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required:

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

……

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast
   Brightness } normal
2. Set the pattern generator raster signal to a green raster.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-1.)
5. Switch the raster signal to blue, then to red and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screw.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-4.)

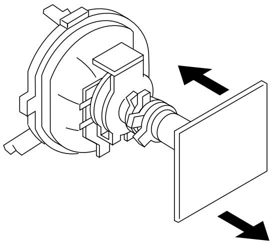


Fig. 3-1

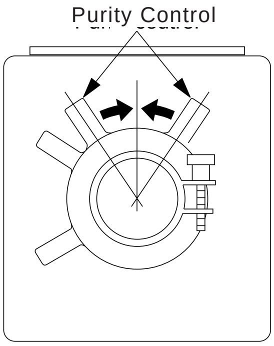

Purity Control

Fig. 3-2

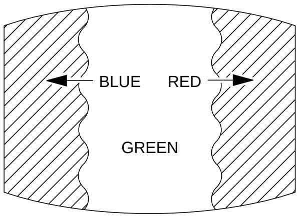

BLUE
RED
GREEN

Fig. 3-3

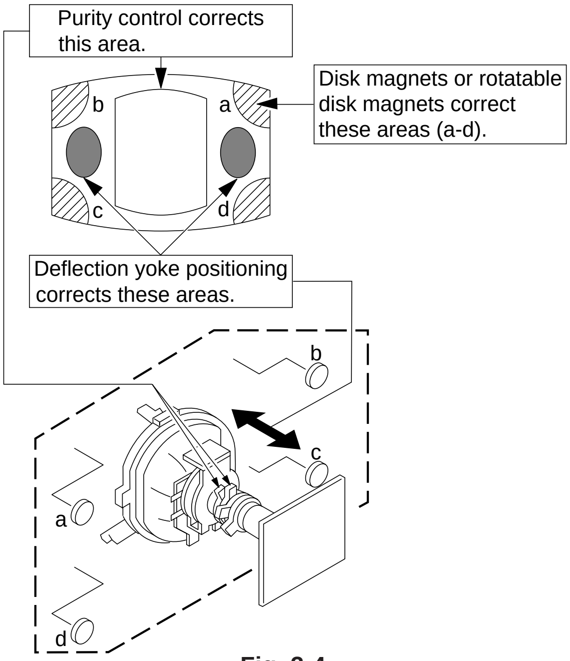

Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas (a-d).
b
a
c
d
Deflection yoke positioning corrects these areas.
b
c
a
d

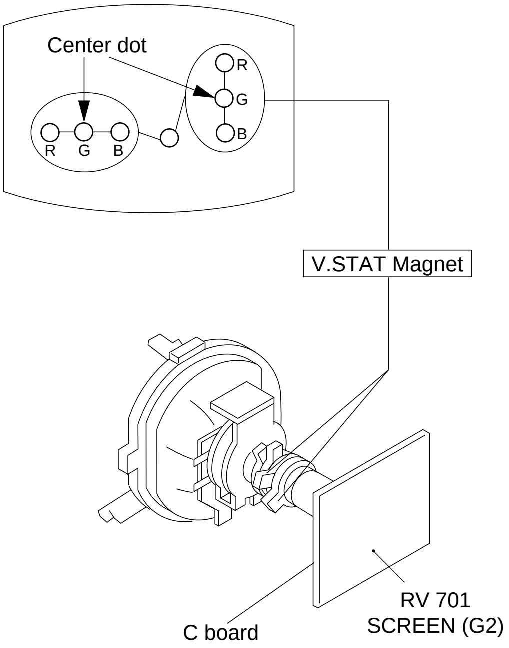
Fig. 3-4

3-2. CONVERGENCE

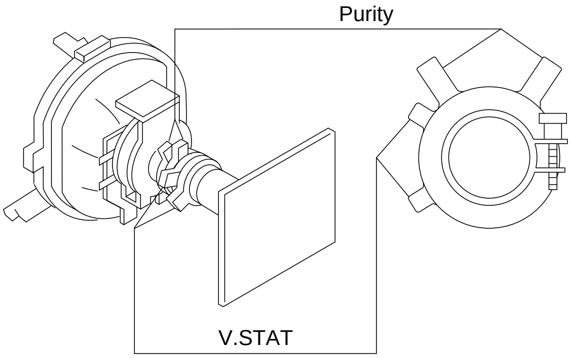
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

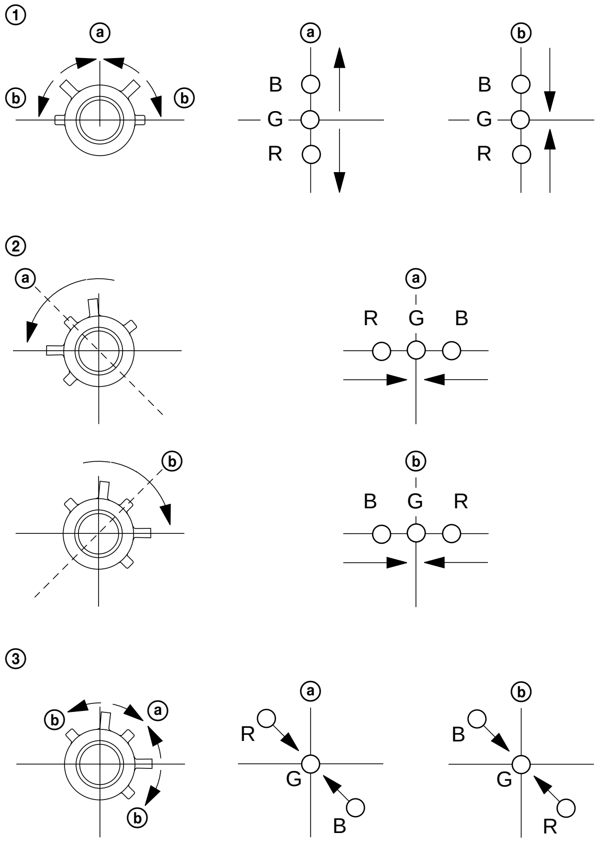
(1) Horizontal and Vertical Static Convergence



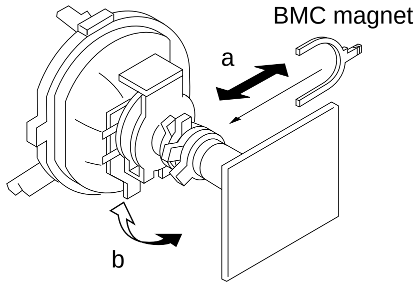
1. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue points are on top of each other at the center of the screen.
2. (Moving horizontally), adjust the H.STAT magnet so that the red, green and blue points are on top of each other at the center of the screen.
3. Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



- Operation of V.STAT magnet.
  If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green and blue points move as shown below.



- Operation of BMC (Hexapole) magnet.
  If the blue or red point does not converge with the other two points, perform following steps:
  Move BMC magnet (a) to correct insufficient H.static convergence.
  Rotate BMC magnet (b) to correct insufficient V.static convergence
  In either case, repeat Beam Landing Adjustment.

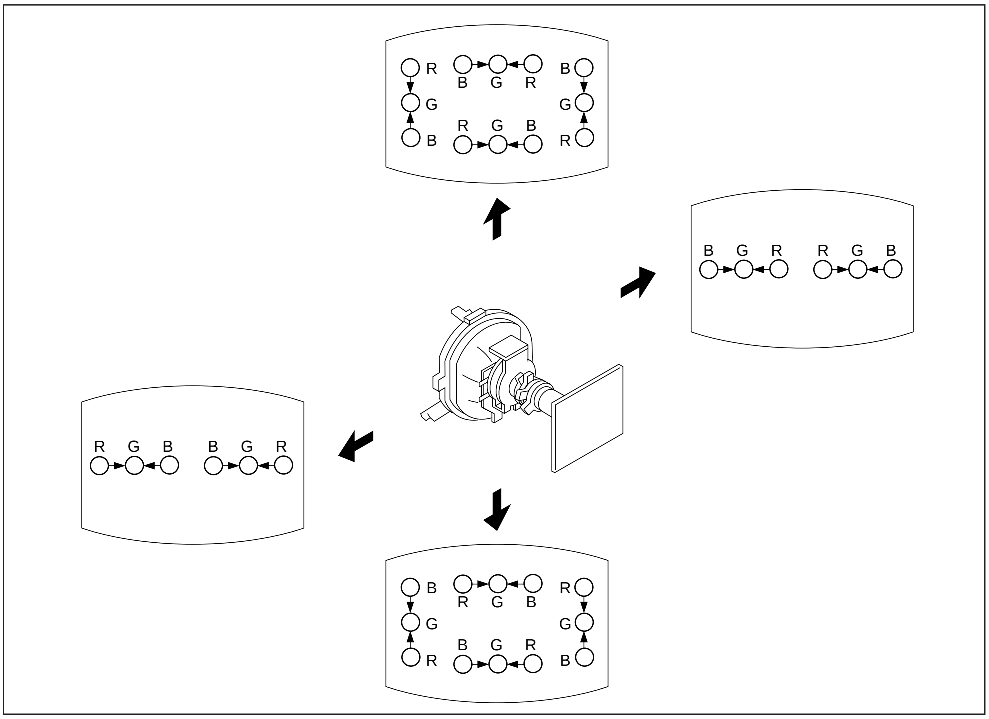


(2) Dynamic Convergence Adjustment

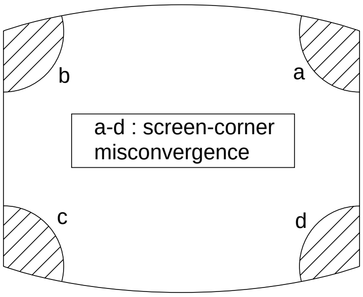
Preparation :

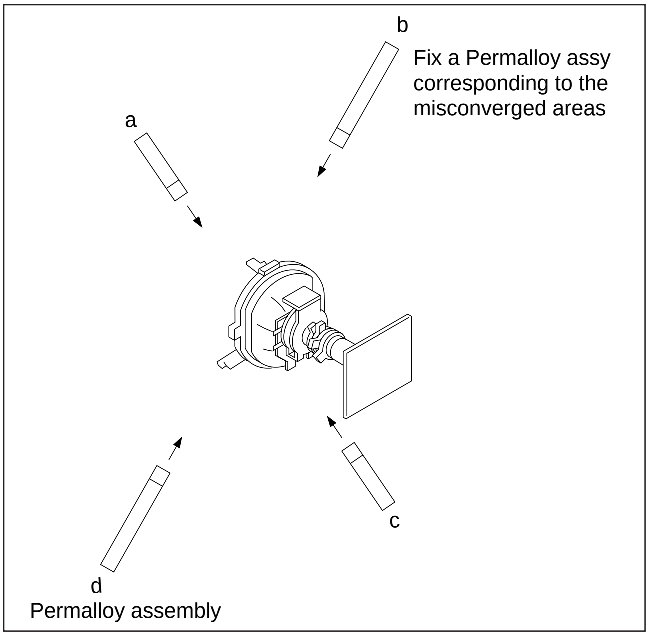
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.


R
B G R
B
G
G
R G B
B
R
B G R
R G B
R G B
B G R
B
R G B
R
G
G
B G R
R
B

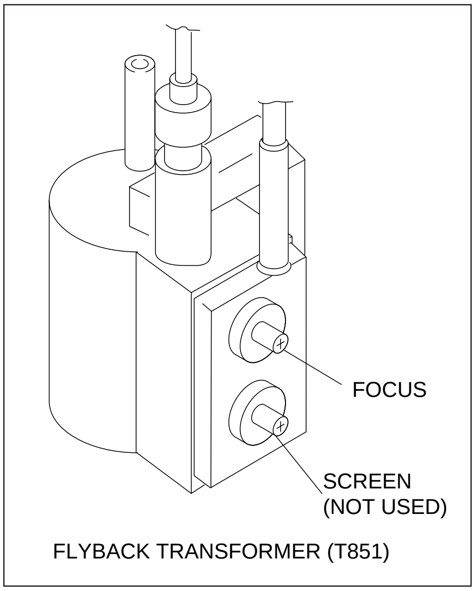
(3) Screen-corner Convergence


b
a
a-d : screen-corner misconvergence
c
d


b
Fix a Permalloy assy corresponding to the misconverged areas
a
c
d
Permalloy assembly

3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



Note: Screen VR is not use.

a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Initial DATA	Note
09	RDR	25	WHITE POINT R
0A	GDR	20	WHITE POINT G
0B	BDR	20	WHITE POINT B

b. METHOD OF CANCELLATION FROM SERVICE MODE

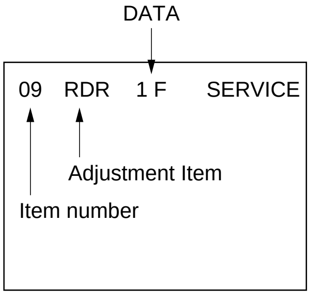
Set the standby condition (Press POWER button on the commander) and then press POWER button again, hereupon it becomes TV mode.

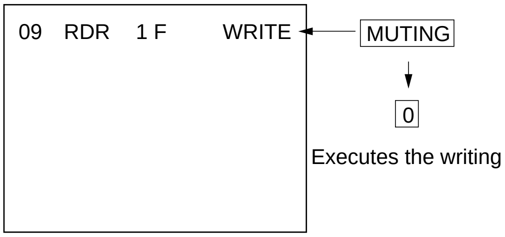
c. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN) to select the item of adjustments.
3) Press MUTING button and it will indicate WRITE on screen.
4) Press 0 button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again to confirm adjustments were made.

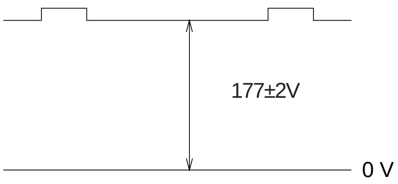




3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust G2 (RV701) volume to the value below.



2. WHITE BALANCE ADJUSTMENTS

1) Set to Service Mode.
2) Input an entire white signal.
3) Set the PICTURE to maximum.
4) Select RDR(09) with 1 and 4 , and then set the level to 25 with 3 and 6 .
5) Select GDR(0A) and BDR(0B) with 1 and 4 and adjust the level with 3 and 6 for the best white balance.
6) Write into the memory by pressing MUTING then 0 .

SECTION 4
SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

Flickering is operated by lighting the LED's for 60ss each time.

The flickering frequency responding to each failed device is shown below.

Device	NONVOLATILE MEMORY	—	Y/C JUNGLE	—	—	—
Flickering Frequency	1	—	3	—	—	—

All the devices are checked one after another from the left of the table.
If an error is found, the responding LED will start flickering.
So, if more than 1 device have failed, only the one on the left side will flicker.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-883 that comes with this unit.

Entering service mode

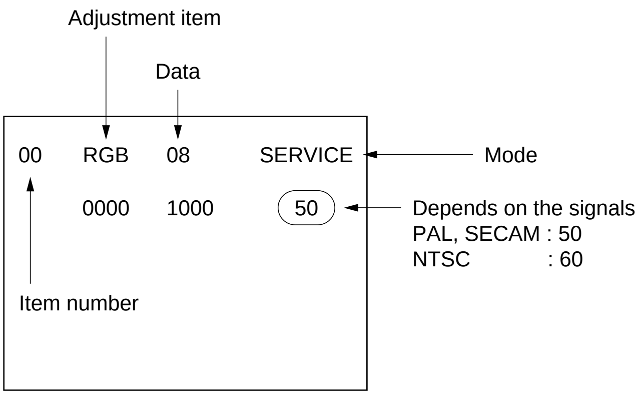
With the unit on standby
↓
DISPLAY
↓
5
↓
VOL (+)
↓
POWER

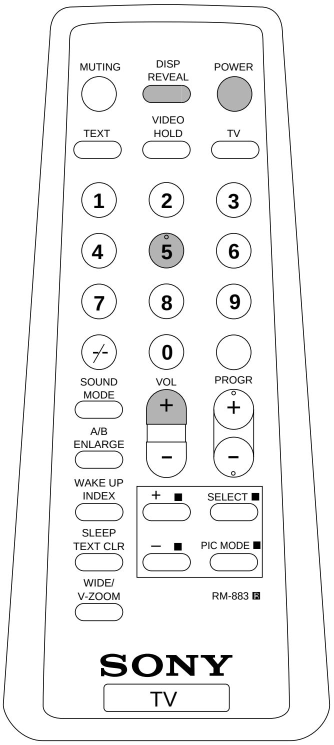
The operation sequence puts the unit into service mode.

1, 4	Raise/lower the service item number
3, 6	Raise/lower the data
MUTING	Writes
0	Executes the writing

7, 0	All data becomes the values in memory
8, 0	All user control goes to the standard state
5, 0	Service data initialization (Be sure not to use usually).
2, 0	Write 50Hz adjustment data to 60Hz, or viceversa.

The screen display is :


Adjustment item
Data
00
RGB
08
SERVICE
Mode
0000
1000
50
Depends on the signals
PAL, SECAM : 50
NTSC : 60
Item number


MUTING
DISP REVEAL
POWER
TEXT
VIDEO HOLD
TV
1
2
3
4
5
6
7
8
9
-/--
0
SOUND MODE
VOL
PROGR
+
–
A/B ENLARGE
WAKE UP INDEX
SELECT
SLEEP TEXT CLR
PIC MODE
WIDE/ V-ZOOM
RM-883
SONY
TV

RM-883

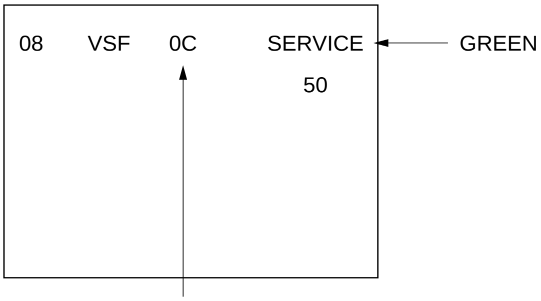
1, 4	Select the adjustment item.
↓	
3, 6	Raise/lower the data.
↓	
MUTING	Writes
↓	
0	Executes the writing.

5-2. ADJUSTMENT METHOD

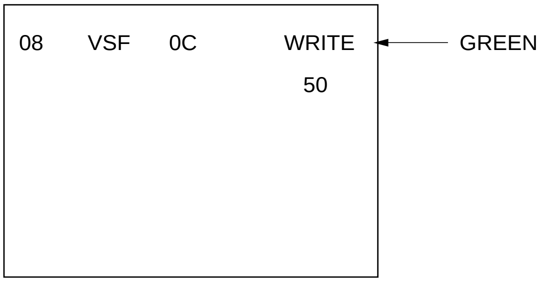
Item Number 08

This explanation uses V-SHIFT as an example.

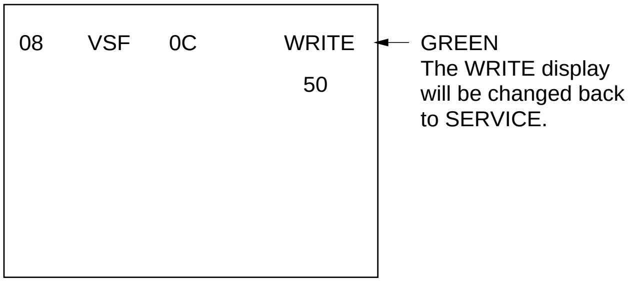
1. Select 08 V-SHIFT with the 1 and 4 buttons.
2. Raise/lower the data with the 3 and 6 buttons.
3. Select the optimum state. (The standard is 0F for PAL reception.)
4. Write with the MUTING button. (The SERVICE display will change to WRITE)
5. Execute the writing with the 0 button. (The WRITE display will be changed back to SERVICE.)


08
VSF
0C
SERVICE
50
GREEN

Adjust with the 3 and 6 buttons.


08
VSF
0C
WRITE
50
GREEN

Written with the MUTING.


08
VSF
0C
WRITE
50
GREEN
The WRITE display
will be changed back
to SERVICE.

Write executed with 0 .

Use the same method for Items Number 00-33. Use 1 and 4 to select the adjustment item, use 3 and 6 to adjust, write with MUTING, then execute the write with 0.

Adjustment Item Table

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
00	HSF	00–3F	24		H SHIFT	(TDA8375)
01	HSZ	00–3F	23		H SIZE	(TDA8375)
02	PAP	00–3F	21		PIN AMPLITUDE	(TDA8375)
03	CNP	00–3F	29		CORNER PIN	(TDA8375)
04	TLT	00–3F	20		TILT	(TDA8375)
05	VSL	00–3F	20		V SLOPE	(TDA8375)
06	VAP	00–3F	1D		V AMPLITUDE	(TDA8375)
07	SCR	00–3F	20		S CORRECTION	(TDA8375)
08	VSF	00–3F	20		V SHIFT	(TDA8375)
09	RDR	00–3F	25		WHITE POINT R	(TDA8375)
0A	GDR	00–3F	20		WHITE POINT G	(TDA8375)
0B	BDR	00–3F	20		WHITE POINT B	(TDA8375)
0C	FO	00–03	00	TV: 00 VIDEO: 00 TEXT: 01	ø-1TIME CONSTANT	(TDA8375)
0D	AGC	00–3F	30	TV: 30 VIDEO: 30 TEXT: 30	AGC TAKE OVER	(TDA8375)
0E	VSW	00–01	00	TV: 00 VIDEO: 01 TEXT: 00	VIDEO MUTE	(TDA8375)
0F	FOR	00–03	03		FORCED FIELD FREQ.	(TDA8375)
10	DL	00–01	00		INTERLACE	(TDA8375)
11	POC	00–01	00		SYNCHRO MODE FIX	(TDA8375)
12	VID	00–01	00		VIDEO IDENT MODE	(TDA8375)
13	HCO	00–01	00		EHT TRACKING MODE	(TDA8375)
14	EVG	00–01	00		ENABLE V GUARD	(TDA8375)
15	SBL	00–01	00		SERVICE BLANKING	(TDA8375)
16	PRD	00–01	00		OVER-VOLTAGE INPUT	(TDA8375)
17	COR	00–01	00		NOISE CORING PEAK	(TDA8375)
18	PMX	00–3F	2B		PICTURE MAX DATA	(TDA8375)
19	PMI	00–3F	04		PICTURE MIN DATA	(TDA8375)
1A	SBR	00–7F	4B		SUB-BRIGHTNESS	(TDA8375)
1B	SHU	00–0F	07		SUB-HUE	(TDA8375)
1C	SSH	00–03	01	TV: 01 VIDEO: 02	SUB-SHARPNESS	(TDA8375)
1D	SC1	00–3F	1F	50: 26 60: 29	SUB-COLOR LOWER	(TDA8375)
1E	SC2	00–3F	0D	50: 0C 60: 0D	SUB-COLOR HIGHER	(TDA8375)
1F	AIP	00–7F	3F		ADJUSTMENT IF-PLL	(TDA8375)
20	VZM	00–3F	19		VERTICAL ZOOM	(TDA8375)
21	TXP	00–0F	07		TEXT PICTURE	(SAA5281)
22	MXP	00–0F	0A		TEXT MIX MODE PICTURE	(SAA5281)
23	BKP	00–3F	00		BLK OFF PICTURE	(µ-CON)
24	ODL	00–FF	10		POWER ON DELAY	(µ-CON)
25	OFR	00–0F	00		STBY → ON RGB OUT	(µ-CON)
26	OFM	00–0F	00		MAIN POWER RGB OUT	(µ-CON)
27	OSH	00–3F	0A		OSD POSITION H	(µ-CON)
28	MUT	00–01	00		NO SYNC. MUTE	(µ-CON)
29	ABL	00–01	00		BRIGHT ABL	(µ-CON)
2A	DTV	00–01	00		DISABLE TV SYSTEM KEY	(µ-CON)
2B	SCM	00–01	00		SECAM TRAP ACTIVE	(µ-CON)
2C	ROC	00–0F	07		ROTATION CENTER	(µ-CON)
2D	ROS	00–07	03		ROTATION STEP WIDTH	(µ-CON)
2E	DVM	00–01	00		DISABLE VM	(µ-CON)
2F	POM	00–01	01		PORT MUTE	(µ-CON)
30	FBT	00–01	01		C/M FOR FBT LAYER SHORT	(µ-CON)
31	OP0	00–FF	2E		OPTION 0	(µ-CON)
32	OP1	00–FF	0C		OPTION 1	(µ-CON)
33	OP2	00–FF	26		OPTION 2	(µ-CON)

NOTE

- Standard Data. Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.
- 50 .... 50 Hz data
- 60 .... 60 Hz data
- Standard data listed on the Adjustment Item Table are reference values.

ITEM INFORMATION

- 10. DL: TV/MIX Mode 0=Interlace 1=Non-interlace, TEXT Mode 0=Non-interlace 1=Interlace
- 29. ABL: Bright ABL ON/OFF ON=1 OFF=0
- 31. OP0 • 32. OP1 • 33. OP2:
  Input data are different according to models.
  AV INPUT : 00→NO MODEL, 01→ MONO, CXA1315, 10/11→ STEREO, TDA8424
  TV System : 00→ Multi model, 01→ B/G, 10→ D/K.I, 11→ B/G D/K
  NTSC, SECAM, Chin

No. 31 OP0 * Input data are different according to models

Item	–	AV Input		Sharp 50%	Remote Preset	Auto Program	Arabic	Reserved
KV-G21PD1	0	0	1	0	1	1	1	0

No. 32 OP1

Item	Video Text	Volume 1	Thai B	TV System		NT3.58	SECAM	Reserved
KV-G21PD1	0	0	0	0	1	1	0	0

No. 33 OP2

Item	–	–	Child Lock	Space Sound	High Dev.	100 Prg	4:3 Wide	S. Video
KV-G21PD1	0	0	1	0	0	1	1	0

5-3. A BOARD, ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.

2. Press commander buttons $\boxed{5}$ and $\boxed{0}$ (Data Initialize), and $\boxed{2}$ and $\boxed{0}$ (Data Copy) to initialize the data.

3. Call each item number, and check if the respective screen shows the normal picture.
   In case some items are not well-adjusted, give them fine adjustment.
   Write the data per each item number ($\boxed{\text{MUTING}}$ + $\boxed{0}$).

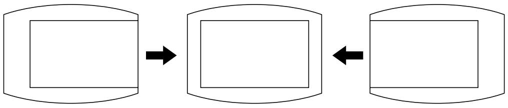
4. Select item numbers and “31” (OP0), “32” (OP1) and “33” (OP2) and set the bit per model with command buttons $\boxed{3}$ and $\boxed{6}$.

5. Press commander buttons $\boxed{8}$ and $\boxed{0}$ (Test Normal) to return all user adjustments to the data that was set on shipment from the factory. (= Cancel Service Mode.)

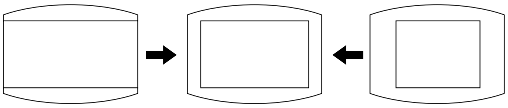
5-4. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 08

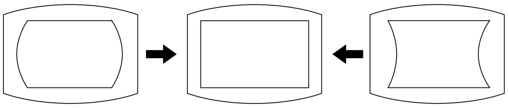
00 HSF (H SHIFT)



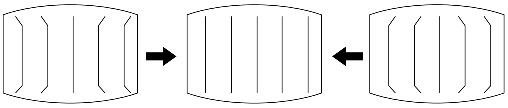
01 HSZ (H SIZE)



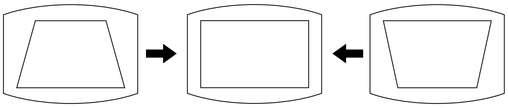
02 PAP (PIN AMPLITUDE)



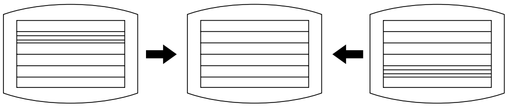
03 CNP (CORNER PIN)



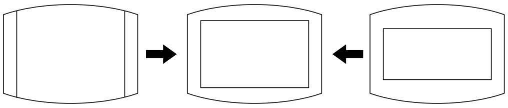
04 TLT (TILT)



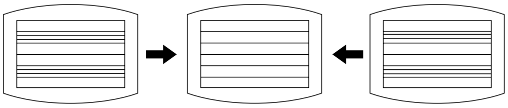
05 VSL (V SLOPE)



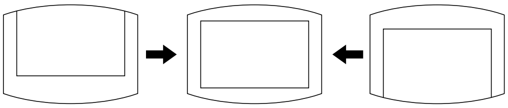
06 VAP (V AMPLITUDE)



07 SCR (S CORRECTION)

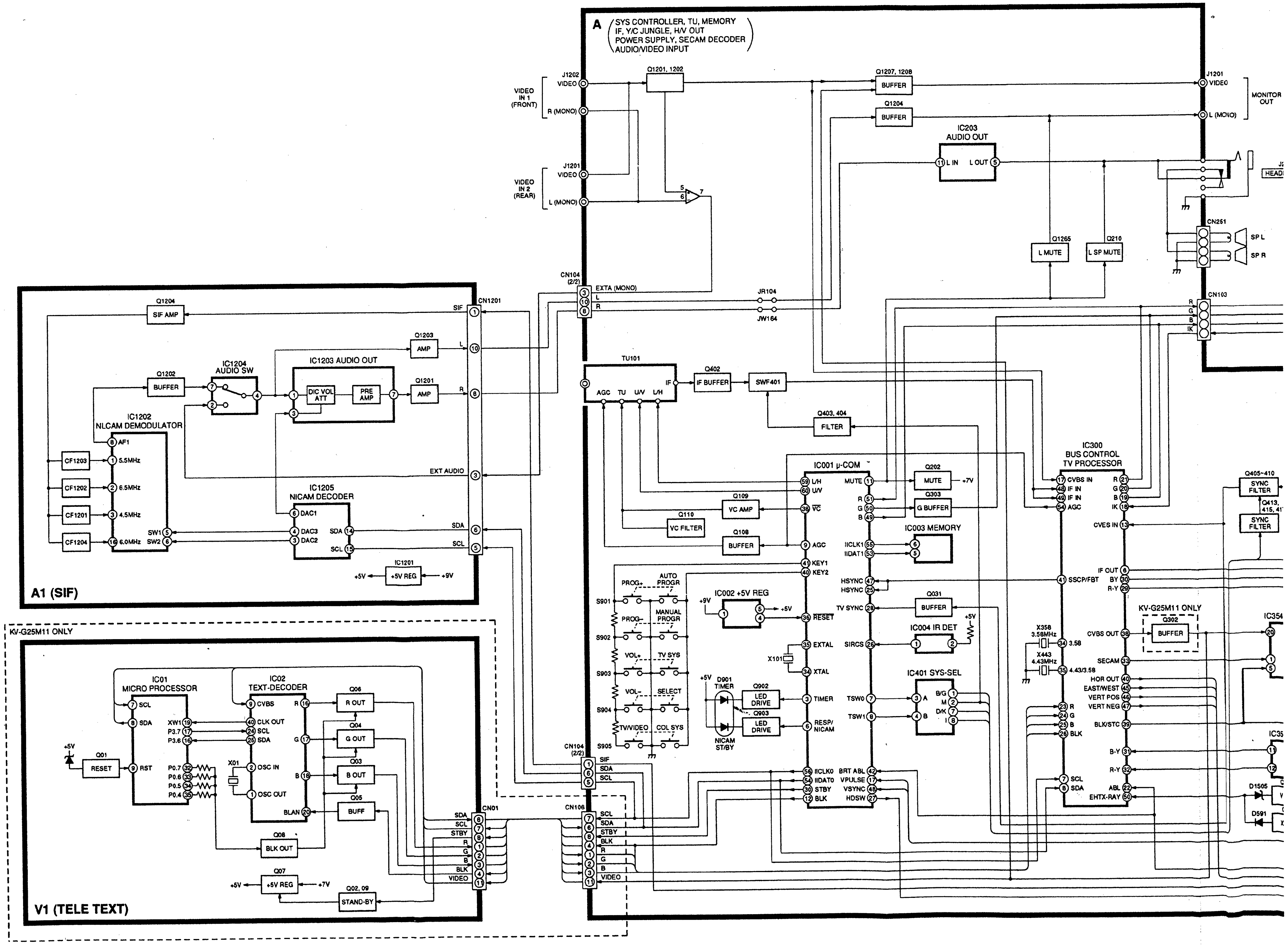


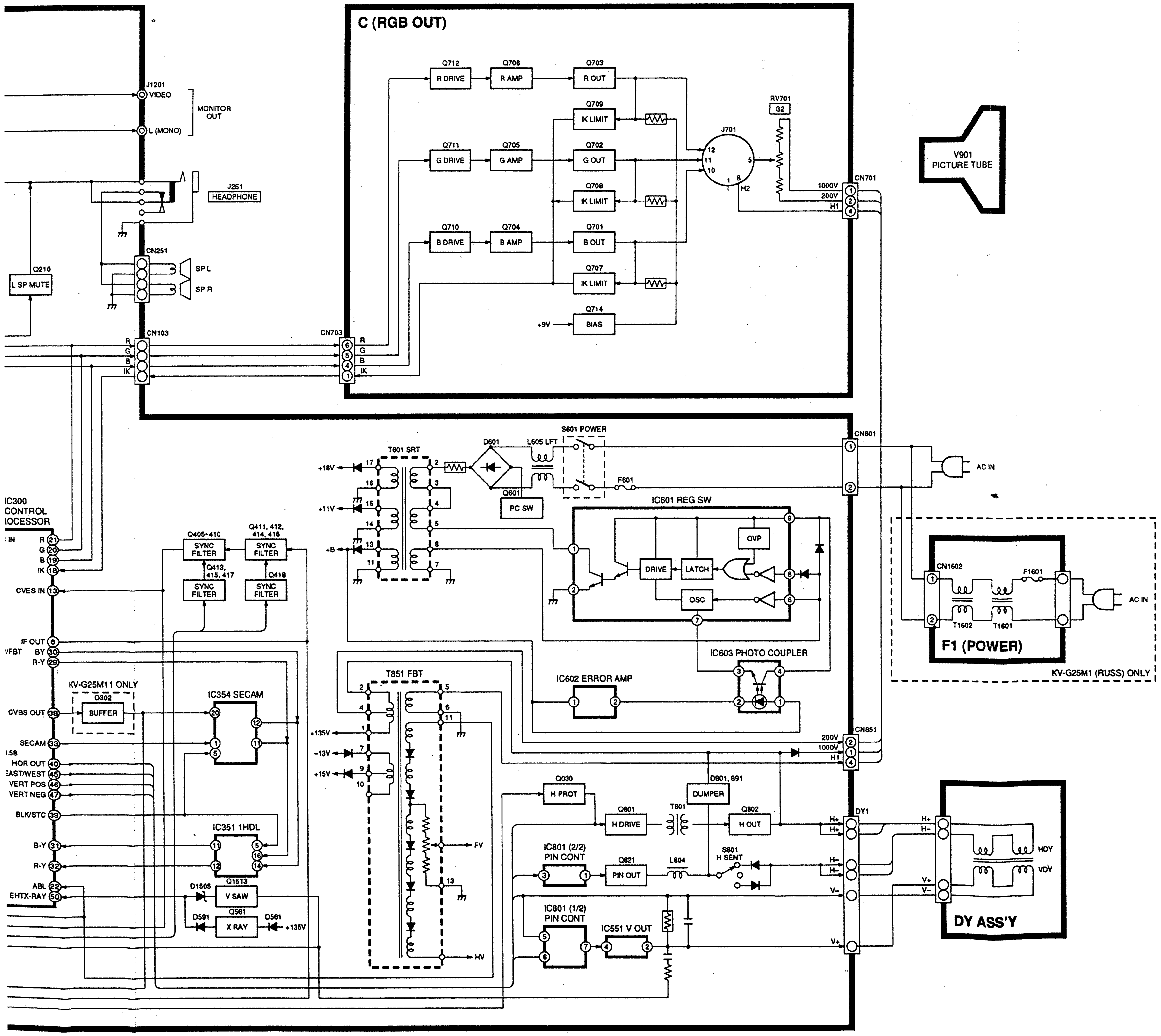
08 VSF (V SHIFT)



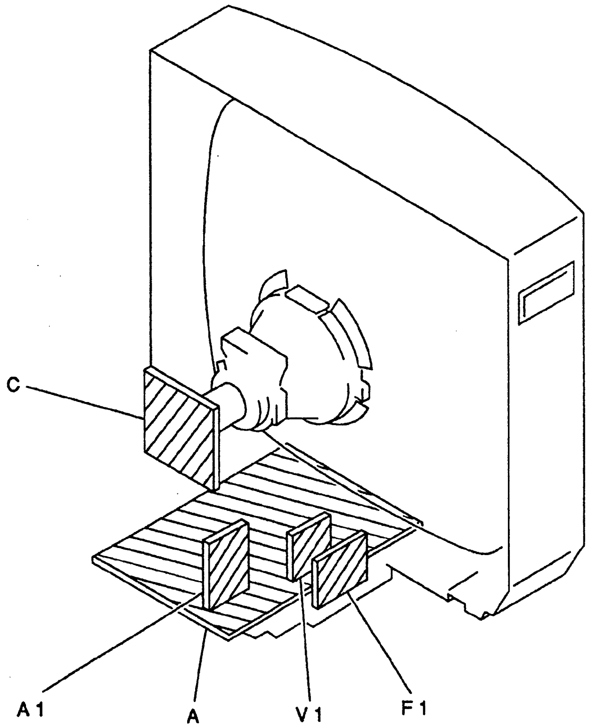
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS


A (SYS CONTROLLER, TU, MEMORY IF, Y/C JUNGLE, H/V OUT POWER SUPPLY, SECAM DECODER AUDIO/VIDEO INPUT)
VIDEO IN 1 (FRONT)
VIDEO IN 2 (REAR)
J1202
J1201
Q1201, 1202
Q1207, 1208 BUFFER
Q1204 BUFFER
IC203 AUDIO OUT
MONITOR OUT
Q1265 L MUTE
Q210 L SP MUTE
CN251
SP L
SP R
CN103
CN104 (2/2)
EXTA (MONO)
JR104
JW164
TU101
AGC TU U/V L/H
Q402 IF BUFFER
SWF401
Q403, 404 FILTER
IC001 µ-COM
Q202 MUTE
Q303 G BUFFER
IC003 MEMORY
Q109 VC AMP
Q110 VC FILTER
Q108 BUFFER
IC002 +5V REG
Q031 BUFFER
IC004 IR DET
IC401 SYS-SEL
X101
D901 TIMER
Q902 LED DRIVE
Q903 LED DRIVE
NICAM ST/BY
S901 PROG+ AUTO PROGR
S902 PROG– MANUAL PROGR
S903 VOL+ TV SYS
S904 VOL– SELECT
S905 TV/VIDEO COL SYS
IC300 BUS CONTROL TV PROCESSOR
X358 3.58MHz
X443 4.43MHz
KV-G25M11 ONLY
Q302 BUFFER
Q405~410 SYNC FILTER
Q413, 415, 41
SYNC FILTER
IC354
IC35
D1505
D591
CN106
A1 (SIF)
Q1204 SIF AMP
Q1202 BUFFER
IC1204 AUDIO SW
IC1203 AUDIO OUT
DIC VOL ATT
PRE AMP
Q1203 AMP
Q1201 AMP
IC1202 NLCAM DEMODULATOR
CF1203 5.5MHz
CF1202 6.5MHz
CF1201 4.5MHz
CF1204 6.0MHz
IC1205 NICAM DECODER
IC1201 +5V REG
CN1201
EXT AUDIO
KV-G25M11 ONLY
V1 (TELE TEXT)
IC01 MICRO PROCESSOR
IC02 TEXT-DECODER
Q01 RESET
X01
Q06 R OUT
Q04 G OUT
Q03 B OUT
Q05 BUFF
Q08 BLK OUT
Q07 +5V REG
Q02, 09 STAND-BY
CN01


C (RGB OUT)
Q712 R DRIVE
Q706 R AMP
Q703 R OUT
Q709 IK LIMIT
Q711 G DRIVE
Q705 G AMP
Q702 G OUT
Q708 IK LIMIT
Q710 B DRIVE
Q704 B AMP
Q701 B OUT
Q707 IK LIMIT
Q714 BIAS
+9V
J701
RV701 G2
1000V
200V
H1
H2
CN701
V901 PICTURE TUBE
CN703
R G B IK
CN103
J1201 VIDEO
L (MONO)
MONITOR OUT
J251 HEADPHONE
CN251
SP L
SP R
Q210 L SP MUTE
IC300 CONTROL PROCESSOR
CVES IN
IF OUT
BY
R-Y
CVBS OUT
SECAM
HOR OUT
EAST/WEST
VERT POS
VERT NEG
BLK/STC
B-Y
R-Y
ABL
EHTX-RAY
Q405~410 SYNC FILTER
Q411, 412, 414, 416 SYNC FILTER
Q413, 415, 417 SYNC FILTER
Q418 SYNC FILTER
KV-G25M11 ONLY
Q302 BUFFER
IC354 SECAM
IC351 1HDL
D1505
Q1513 V SAW
Q561 X RAY
D591
D561
+135V
T601 SRT
+18V
+11V
+B
D601
L605 LFT
S601 POWER
Q601 PC SW
F601
IC601 REG SW
DRIVE
LATCH
OVP
OSC
IC602 ERROR AMP
IC603 PHOTO COUPLER
CN801
AC IN
CN1602
F1601
T1602
T1601
F1 (POWER)
KV-G25M1 (RUSS) ONLY
T851 FBT
+135V
-13V
+15V
FV
HV
CN851
200V
1000V
H1
Q030 H PROT
D801, 891 DUMPER
Q801 H DRIVE
T801
Q802 H OUT
IC801 (2/2) PIN CONT
Q821 PIN OUT
L804
S801 H SENT
IC801 (1/2) PIN CONT
IC561 V OUT
DY1
H+
H-
V+
V-
HDY
VDY
DY ASS'Y

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  kΩ = 100Ω, MΩ = 1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)

- -▭- : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Readings are taken with a color-bar signal input.
  no mark : PAL
  ( ) : SECAM
  〈 〉 : NTSC 4.43
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- * : Can not be measured.
- Circled numbers are waveform reference.
- ▬▬▬ : B + bus.
- ▬ ▬ ▬ : B – bus.
- ➡ : signal path.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

PRINTED WIRING BOARD

A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE
H/V OUT, POWER SUPPLY, SECAM DECODER, AUDIO/VIDEO INPUT]

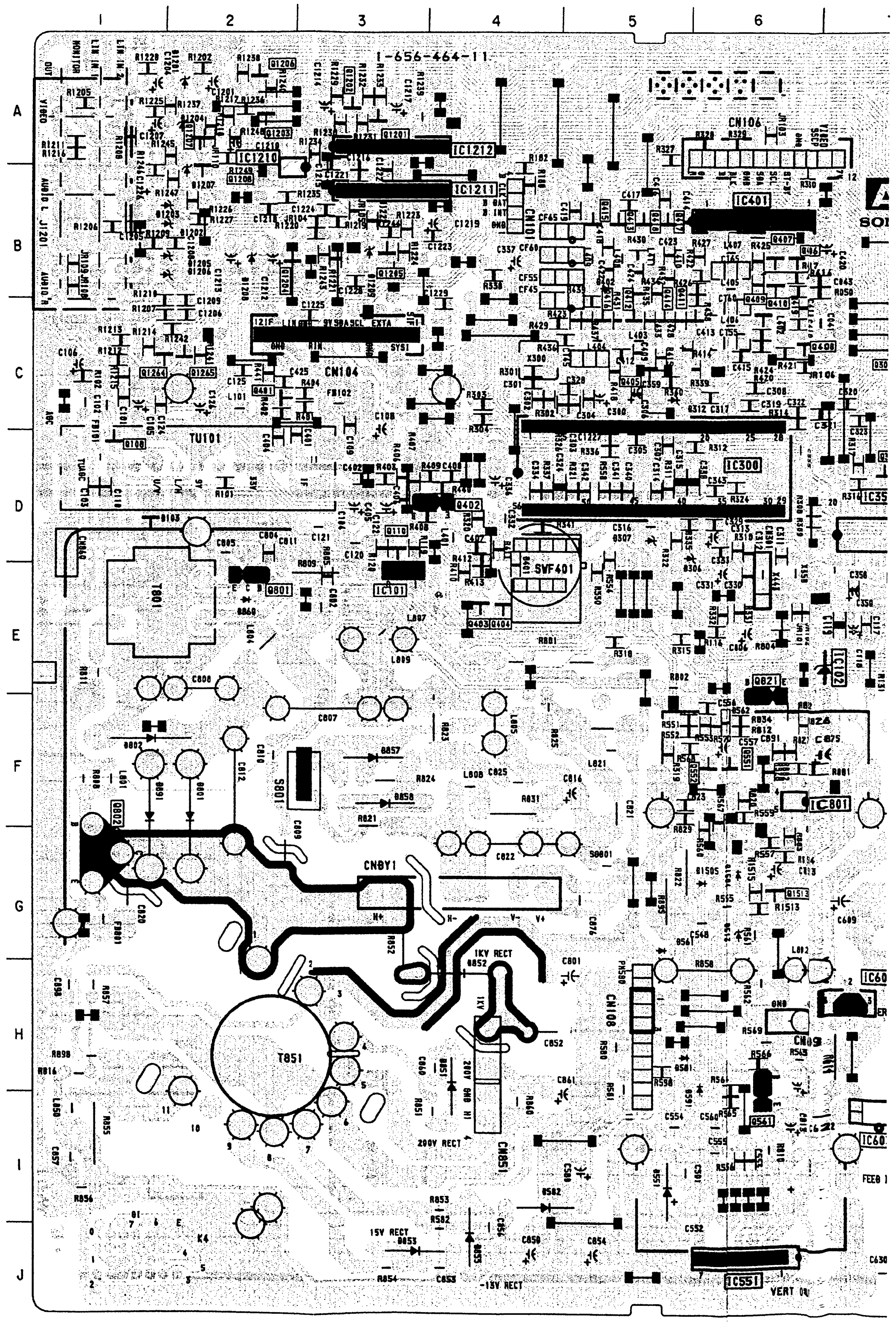
A BOARD

IC	
IC001	D-11
IC002	E-10
IC003	E-11
IC004	I-13
IC102	E-7
IC203	B-10
IC300	D-6
IC351	D-8
IC354	D-7
IC401	B-6
IC521	E-8
IC551	J-6
IC601	J-8
IC602	H-7
IC603	I-7
IC801	F-6
IC1210	A-2

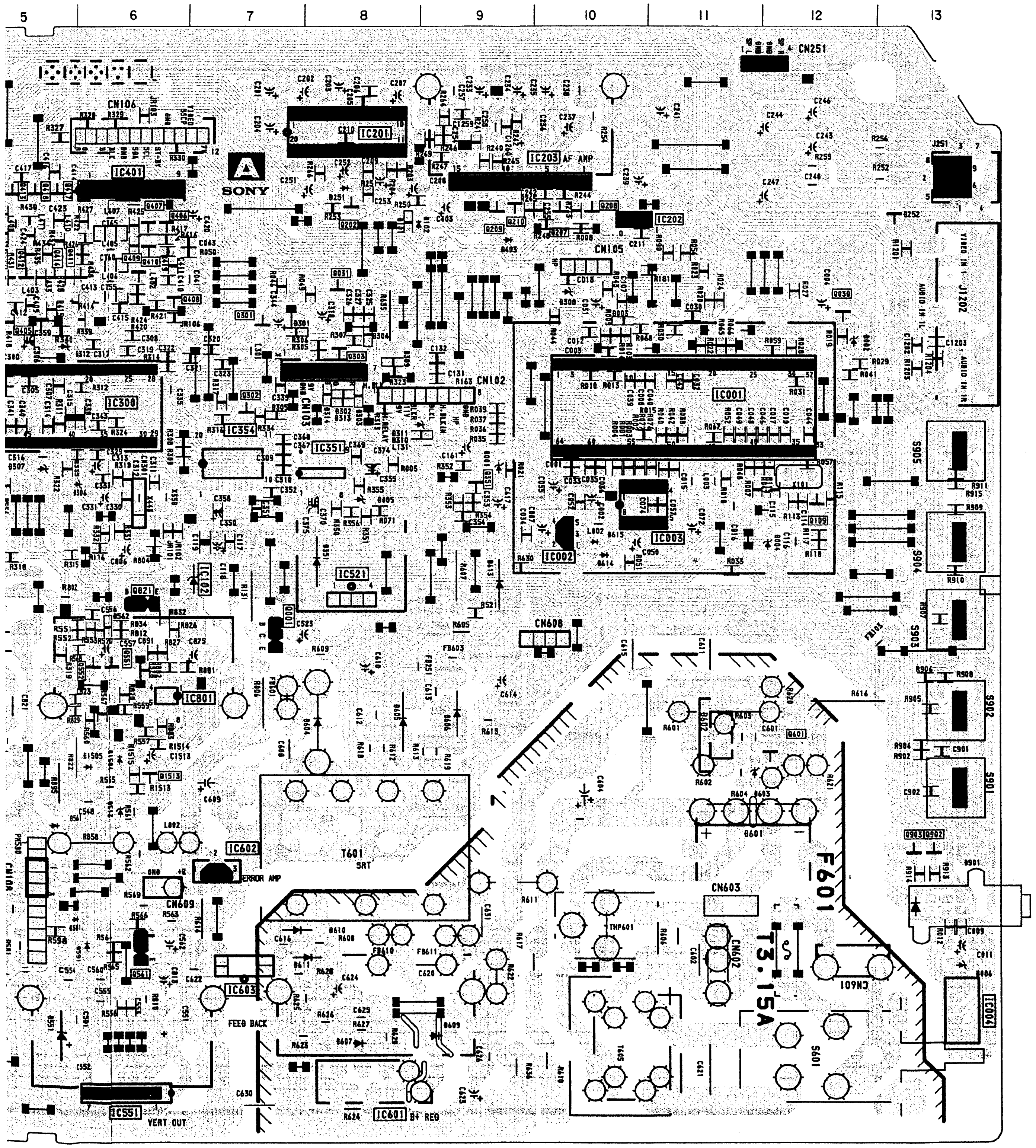
TRANSISTOR	
Q030	C-12
Q031	C-8
Q108	D-1
Q109	E-12
Q110	D-3
Q202	B-8
Q207	B-10
Q208	B-10
Q210	B-9
Q301	C-7
Q302	D-7
Q303	C-8
Q402	D-4
Q403	E-4
Q404	E-4
Q405	C-5
Q406	B-6
Q407	B-6
Q408	C-6
Q409	C-6
Q410	B-6
Q411	C-6
Q412	C-5
Q413	B-5
Q414	C-5
Q415	B-5
Q416	C-5
Q417	B-5
Q418	B-5
Q561	I-6
Q601	G-12
Q801	E-2
Q802	G-1
Q821	E-6
Q902	H-13
Q903	H-13
Q1201	A-3
Q1202	A-3
Q1203	A-2
Q1204	B-2
Q1207	A-2
Q1208	B-2
Q1265	C-2
Q1513	G-6

DIODE	
D001	D-9
D002	C-12
D003	C-10
D004	E-12
D005	E-8
D101	B-8
D102	B-9
D103	D-1
D251	B-8
D252	B-13
D301	C-7
D302	D-8
D303	D-8
D304	C-8
D305	D-7
D306	D-6
D307	D-5
D308	C-10
D310	D-8
D311	D-8
D312	C-5
D313	D-8
D314	D-8
D351	E-8
D401	D-4
D402	B-5
D403	B-9
D513	G-6
D551	I-5
D561	G-5
D591	H-6
D601	G-11
D602	G-11
D603	G-11
D604	G-8
D605	G-8
D606	F-9
D607	I-8
D609	I-9
D610	H-7
D611	I-8
D801	F-2
D802	F-1
D851	H-4
D852	H-4
D853	J-3
D855	J-4
D857	F-3
D858	F-3
D860	E-2
D891	F-1
D901	H-13
D1201	A-2
D1202	B-2
D1207	B-2
D1208	B-2
D1504	G-6
D1505	G-6

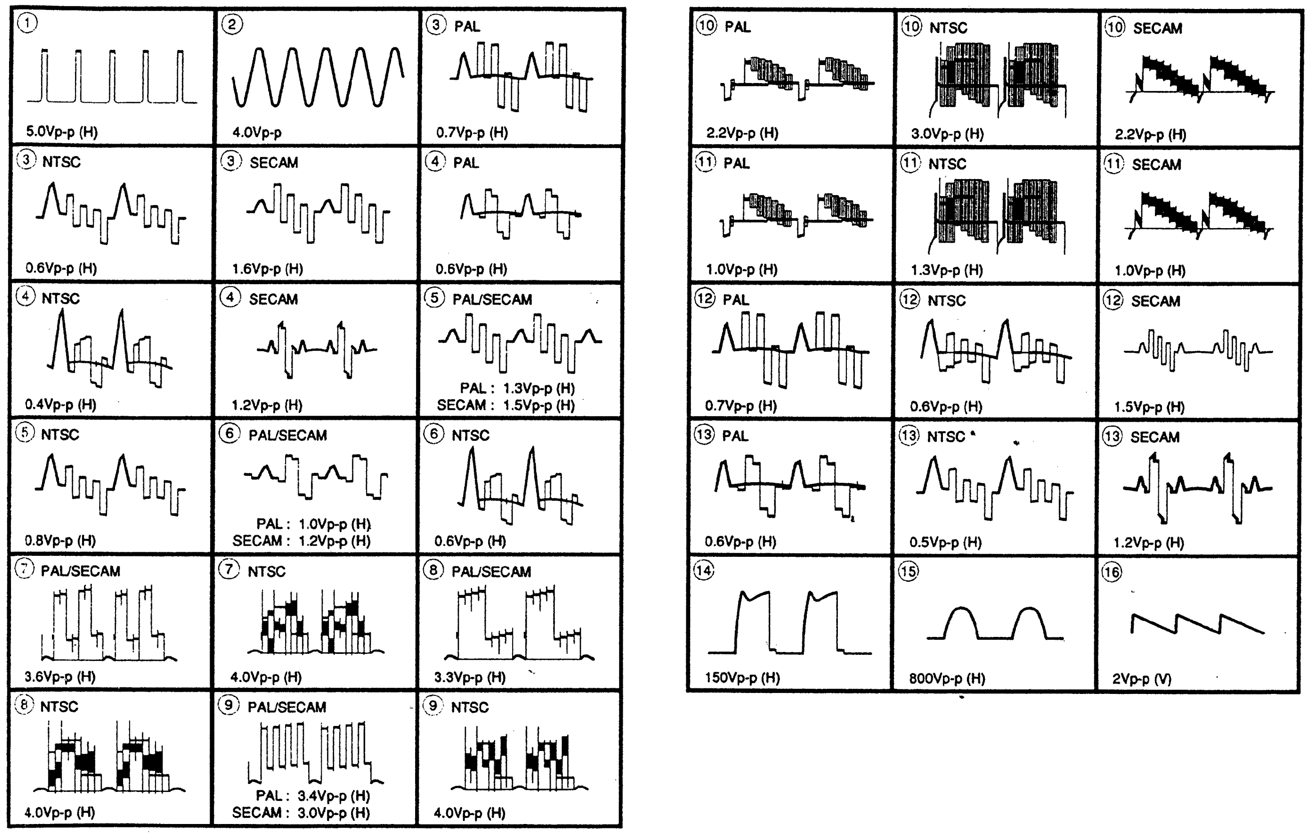
– A Board –

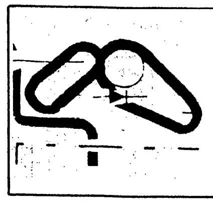


ƎO INPUT


5
6
7
8
9
10
11
12
13
A
SONY
CN251
CN106
IC401
IC201
IC203 AF AMP
IC202
CN105
IC001
CN102
IC300
IC354
IC351
IC003
IC002
IC521
CN608
IC801
T601
SRT
IC602
ERROR AMP
CN609
IC603
FEED BACK
IC551
VERT OUT
IC601
B+ REG
CN603
CN602
CN401
F601
T3.15A
IC004
J1202
S905
S904
S903
S902
S901
S601

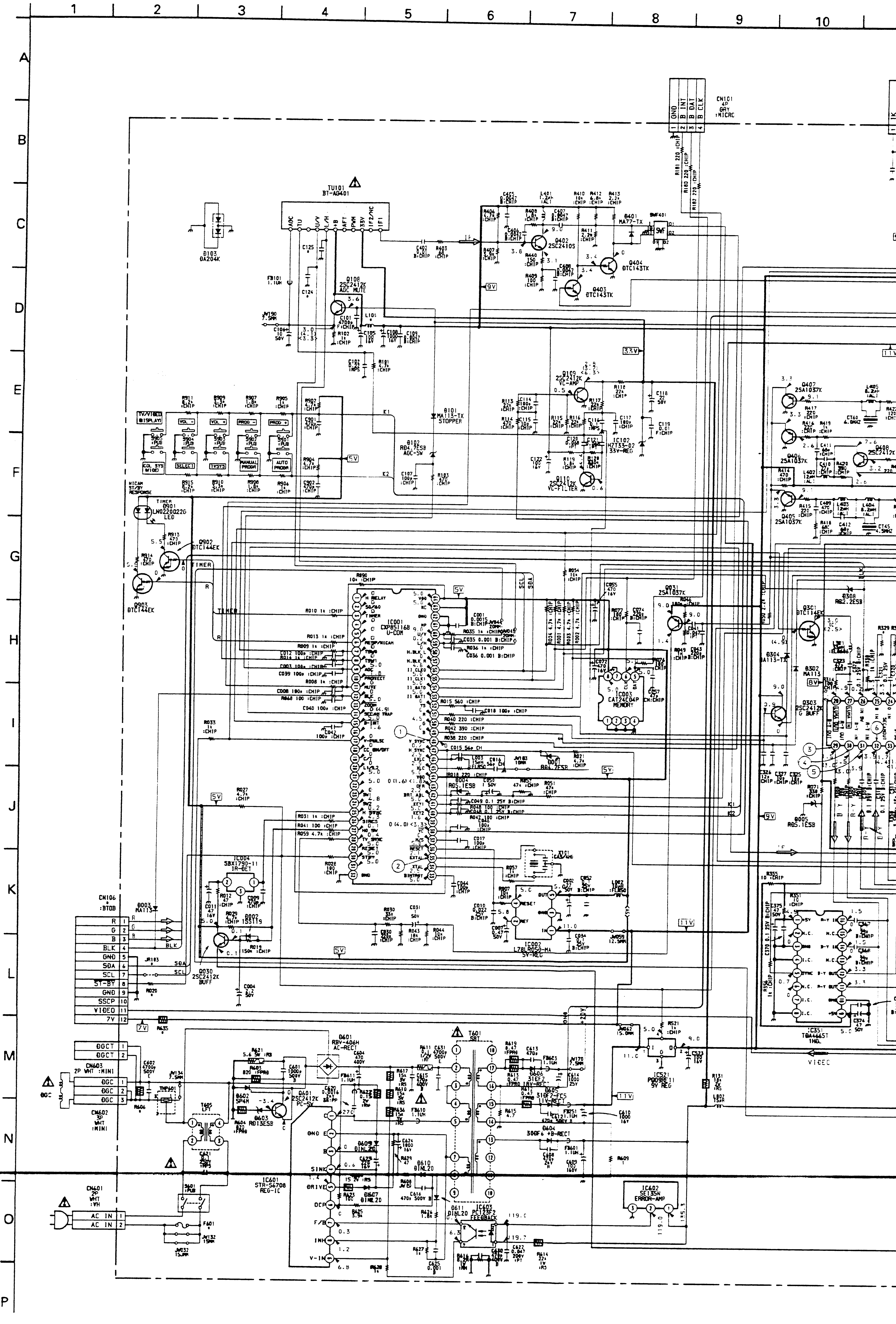
A BOARD WAVEFORMS

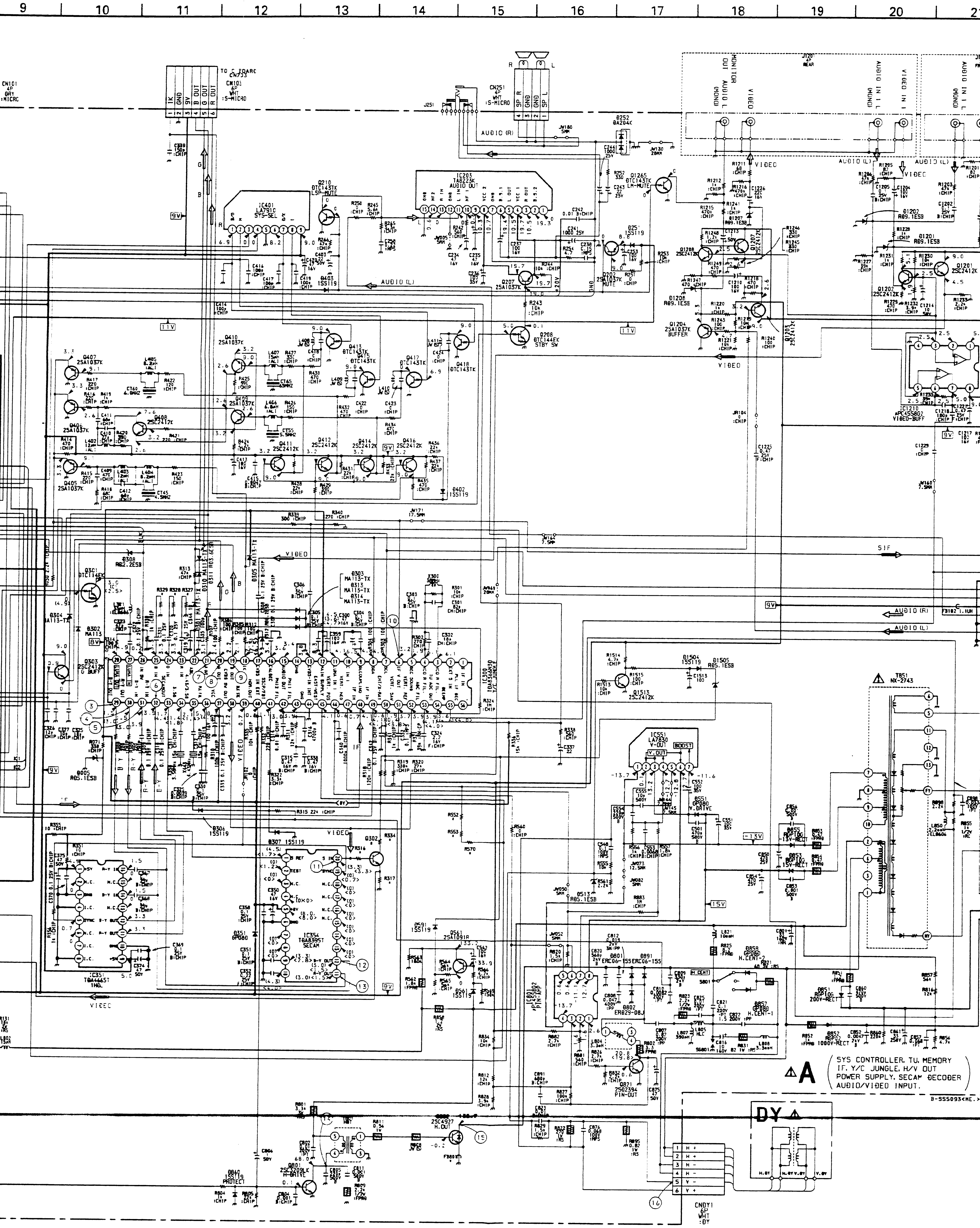


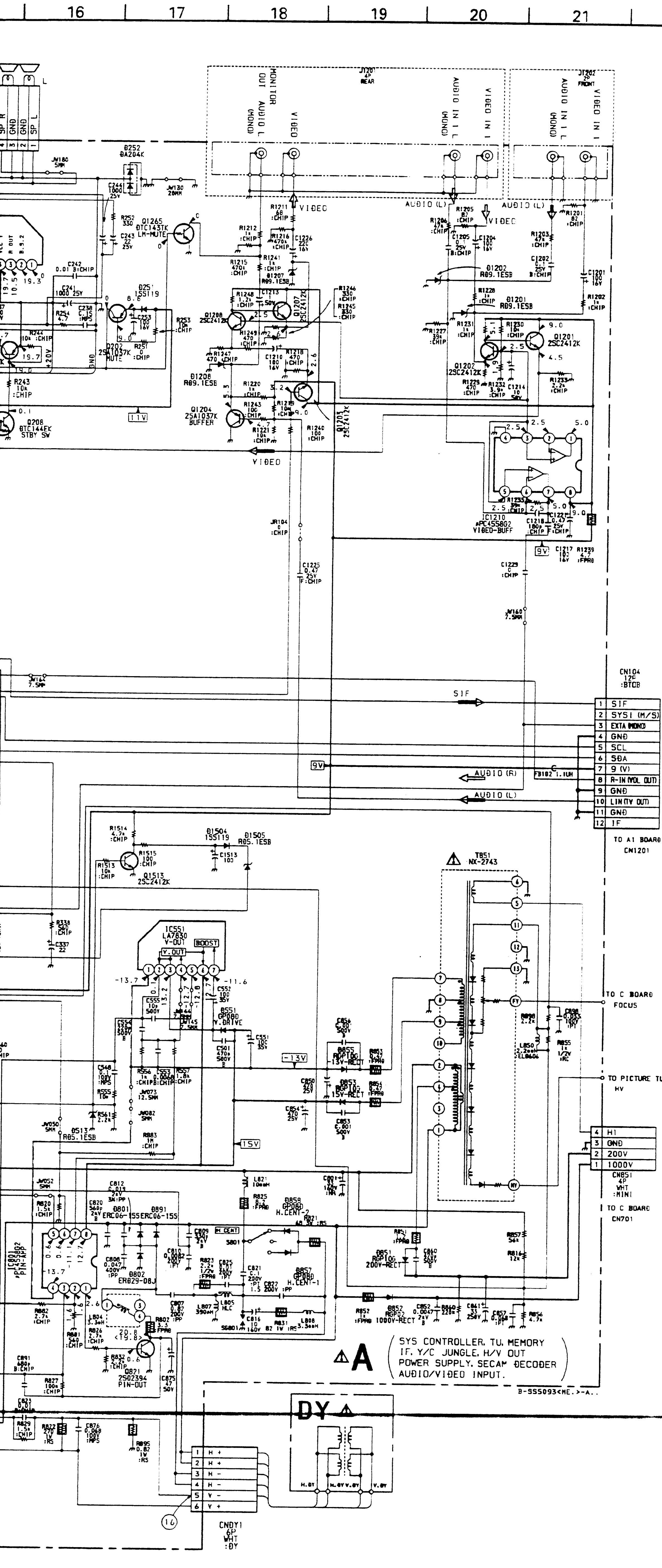


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

(1) Schematic Diagram of A Board


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
CN101 4P GRY :MICRC
1 GND
2 B INT
3 B DAT
4 B CLK
TU101 BT-AG401
AGC
TU
U/V
L/H
+B
AFT
PWM
33V
IF2/NC
IF1
D103 DA204K
Q106 2SC2412K AGC MUTE
Q402 2SC2410S
Q403 DTC143TK
Q404 DTC143TK
D401 MA77-TX
SWF401
Q109 2SC2412K VC-AMP
Q110 2SC2412K VC-FILTER
IC102 HZ733-02 33V-REG
D101 MA113-TX STOPPER
D102 RD4.7ESB AGC-SW
TV/VIDEO DISPLAY
VOL -
VOL +
PROG -
PROG +
COL SYS WIDE
SELECT
TV SYS
MANUAL PROGR
AUTO PROGR
NICAM ST/BY RESPONSE
TIMER D901 LN0220022G LED
Q902 DTC144EK
Q903 DTC144EK
TIMER
IC001 CXP85116B U-COM
IC003 CAT24C04P MEMORY
Q031 2SA1037K
IC004 SBX1790-11 IR-DET
D002 1SS119
Q030 2SC2412K BUFF
IC002 L78LR05D-MA 5V-REG
RESET
REF
OUT
CN106 :BTOB
R
G
B
BLK
GND
SDA
SCL
ST-BY
GND
SSCP
VIDEO
7V
DGCT
DGCT
CN603 2P WHT :MINI
DGC
DGC
DGC
CN602 3P WHT :MINI
DGC
CN601 2P WHT :VH
AC IN
AC IN
D601 RBV-406H AC-RECT
Q601 2SC2412K PC-SW
D602 SP4M
D603 RD13ESB
T605 LFT
IC601 STR-S6708 REG-IC
GND
SINK
DRIVE
OCP
F/B
INH
V-IN
T601 SBT
D611 DIML20
IC603 PC123F2 FEEDBACK
D604 300F6 +B-RECT
D605 31EF2-FC5 11V-RECT
D606 31EF2 18V-RECT
IC521 PQ09RE11 9V REG
IC602 SE135N ERROR-AMP
Q407 2SA1037K
Q406 2SA1037K
Q405 2SA1037K
Q408 2SC2412K
Q301 DTC114EK
Q303 2SC2412K G BUFF
D304 MA113-TX
D302 MA113
D005 RD5.1ESB
D004 RD5.1ESB
IC351 TDA4665T 1HD.
33V
9V
5V
11V
12V
VIDEO

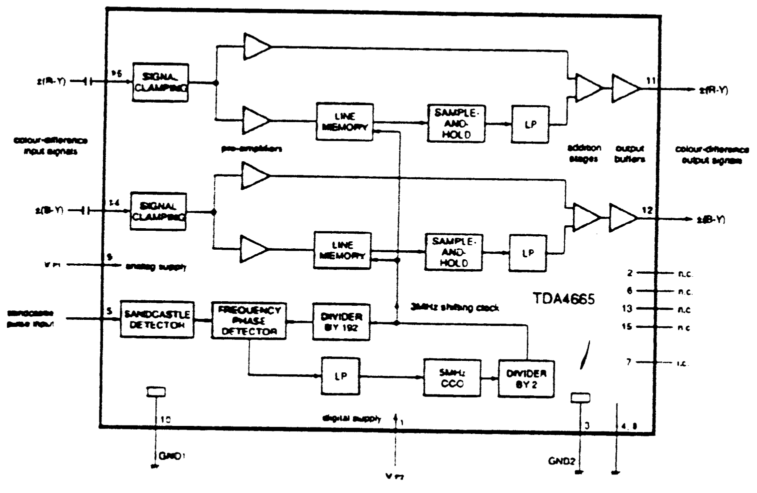

9
10
11
12
13
14
15
16
17
18
19
20
CN101 4P GRY :MICRO
TO C BOARD CN723
CN102 6P WHT :S-MICRO
CN251 4P WHT :S-MICRO
J251
AUDIO (R)
AUDIO (L)
IC401 LA7910 SYS-SEL
IC203 TA8223K AUDIO OUT
Q210 DTC143TK LSP-MUTE
Q1265 DTC143TK LM-MUTE
Q202 2SA1037K MUTE
Q207 2SA1037K
Q208 DTC144EK STBY SW
MONITOR OUT AUDIO L (MONO)
VIDEO
AUDIO IN L (MONO)
VIDEO IN 1
J1201 4P REAR
Q1204 2SA1037K BUFFER
Q1208 2SC2412K
Q1207
Q1203 2SC2412K
Q1201 2SC2412K
Q1202 2SC2412K
IC1210 μPC4558G2 VIDEO-BUFF
VIDEO
SIF
AUDIO (R)
AUDIO (L)
IC300 TDA8362 Y/C JUNGLE
Q301 DTC114EK
Q304 MA113-TX
Q302 MA113
Q303 2SC2412K G BUFF
IC351 TDA4665T 1HD.
IC354 TDA8395T SECAM
Q302
Q306 1SS119
Q307 1SS119
Q1513 2SC2412K
D1504 1SS119
D1505 RD5.1ESB
T851 NX-2743
IC551 LA7830 V-OUT
BOOST
Q551 GP08D V.DRIVE
IC801 PIN-1682
Q801 ERC06-15S
Q802 ER829-08J
Q871 2SD2394 PIN-OUT
2SC4927 H.OUT
Q801 2SC3209LK H-DRIVE
D840 1SS119 PROTECT
Q561 2SA1091R
D591 1SS119
D859 GP08D H.CENT-2
D857 GP08D H.CENT-1
D851 RGP10G 200V-RECT
D855 RGP10G 13V-RECT
D853 RGP10G 15V-RECT
-13V
15V
9V
11V
8V
DY
H.DY
V.DY
CNDY1 6P WHT :DY
1 H+
2 H+
3 H-
4 H-
5 V-
6 V+
SYS CONTROLLER, TU MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT.
A
B-SS5093<ME.>


16
17
18
19
20
21
22
23
MONITOR OUT AUDIO L (MONO)
VIDEO
J1201 4P REAR
AUDIO IN L (MONO)
VIDEO IN 1
J1202 2P FRONT
AUDIO IN L (MONO)
VIDEO IN 1
Q1265 DTC143TK LM-MUTE
Q1208 2SC2412K
Q1207 2SC2412K
Q1204 2SA1037K BUFFER
Q1203 2SC2412K
Q1201 2SC2412K
Q1202 2SC2412K
IC1210 μPC4558G2 VIDEO-BUFF
Q208 DTC144EK STBY SW
Q202 2SA1037K MUTE
CN104 12P :BTCB
1 SIF
2 SYS1 (M/S)
3 EXTA MONO
4 GND
5 SCL
6 SDA
7 9 (V)
8 R-IN (VOL OUT)
9 GND
10 LIN (TV OUT)
11 GND
12 IF
TO A1 BOARD CN1201
AUDIO (R)
AUDIO (L)
SIF
9V
T851 NX-2743
TO C BOARD FOCUS
TO PICTURE TUBE HV
IC551 LA7830 V-OUT
BOOST
Q551 GP08D V.DRIVE
-13.7
-11.6
-13V
15V
4 HI
3 GND
2 200V
1 1000V
CN851 4P WHT :MINI
TO C BOARD CN701
Q1513 2SC2412K
D1504 1SS119
D1505 RD5.1ESB
IC801 μPC1555C PIN-AMP
Q821 2SD2394 PIN-OUT
D858 GP08D H.CENT-2
D857 GP08D H.CENT-1
D852 RGP02 1000V-RECT
D851 RGP10G 200V-RECT
D855 RGP10G -13V-RECT
D853 RGP10J 15V-RECT
1 H+
2 H+
3 H-
4 H-
5 Y-
6 Y+
CNDY1 6P WHT :DY
DY
H.DY
V.DY
A
SYS CONTROLLER, TU, MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT.
B-SS5093<ME. >-A..

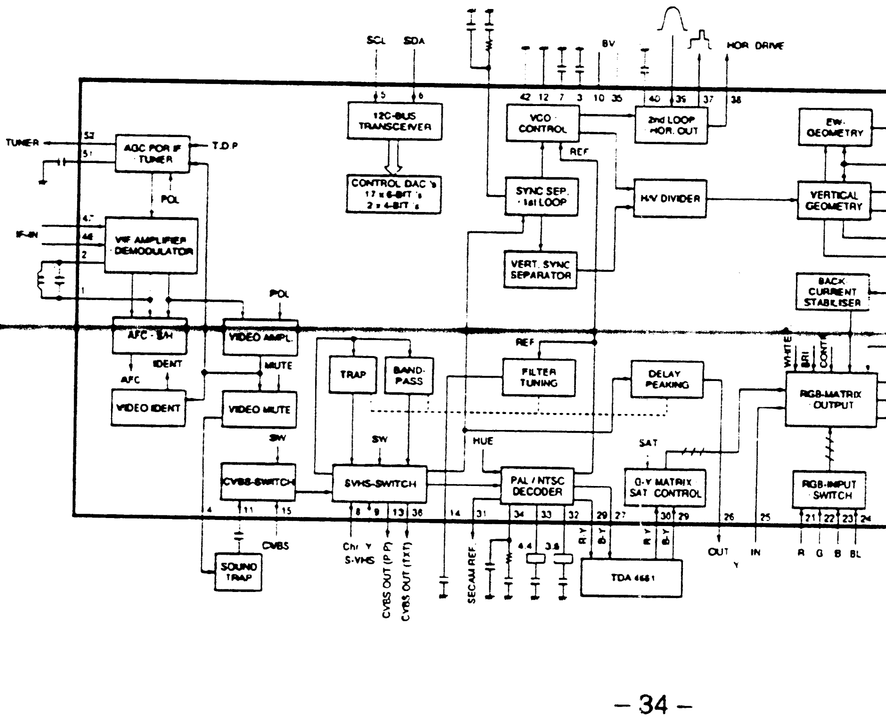
A BOARD * MARK LIST

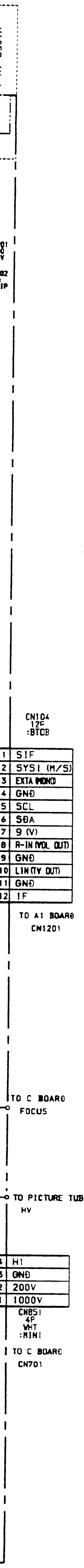
	KV-G25M1(ME)	KV-G25M1(HK)	KV-G25M1(
CN106	NOT USED	NOT USED	NOT US
CN601	TO POWER CORD	TO POWER CORD	TO F1 BOARD
F601	T3.15A	T3.15A	NOT US
FB801	1.1uH	1.1uH	1.9uH
JR103	NOT USED	NOT USED	NOT US
JW032	NOT USED	NOT USED	15MM
JW132	NOT USED	NOT USED	15MM
Q302	NOT USED	NOT USED	NOT USI
R020	NOT USED	NOT USED	NOT USI
R316	NOT USED	NOT USED	NOT USI
R317	NOT USED	NOT USED	NOT USI
R327	0 : CHIP	0 : CHIP	0 : CHIP
R328	0 : CHIP	0 : CHIP	0 : CHIP
R329	C : CHIP	0 : CHIP	0 : CHIP
R334	NOT USED	NOT USED	NOT USE
R552	NOT USED	NOT USED	220K : CHIP
R553	NOT USED	NOT USED	0 : CHIP
R570	NOT USED	NOT USED	0 : CHIP
R635	NOT USED	NOT USED	NOT USE

A BOARD IC351 TDA4665T


±(R-Y)
SIGNAL CLAMPING
LINE MEMORY
SAMPLE-AND-HOLD
LP
colour-difference input signals
pre-amplifiers
addition stages
output buffers
colour-difference output signals
±(B-Y)
SANDCASTLE DETECTOR
FREQUENCY PHASE DETECTOR
DIVIDER BY 192
3MHz shifting clock
TDA4665
5MHz CCO
DIVIDER BY 2
sandcastle pulse input
digital supply
GND1
GND2
n.c.

A BOARD IC300 TDA8366N3D

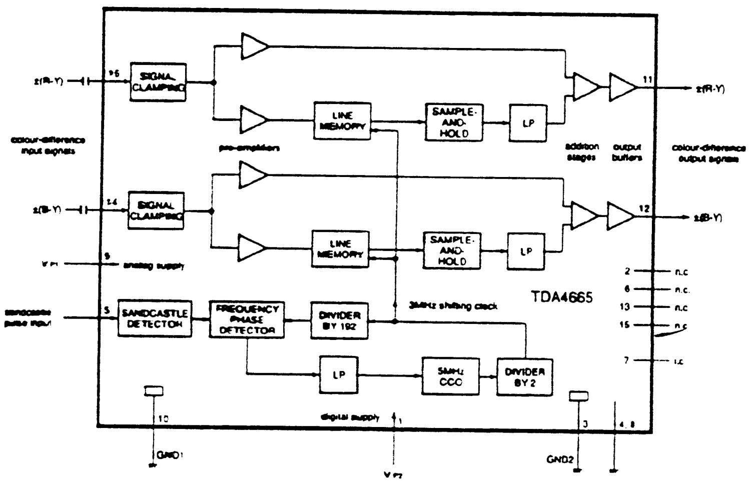

SCL
SDA
HOR DRIVE
TUNER
AGC FOR IF TUNER
T.O.P
I2C-BUS TRANSCEIVER
CONTROL DAC's
VCO CONTROL
2nd LOOP HOR OUT
EW-GEOMETRY
POL
IF-IN
VIF AMPLIFIER DEMODULATOR
SYNC SEP. 1st LOOP
H/V DIVIDER
VERTICAL GEOMETRY
VERT. SYNC SEPARATOR
BACK CURRENT STABILISER
AFC - SW
VIDEO AMPL.
AFC
IDENT
MUTE
VIDEO IDENT
VIDEO MUTE
TRAP
BAND-PASS
FILTER TUNING
DELAY PEAKING
RGB-MATRIX OUTPUT
SW
HUE
SAT
CVBS-SWITCH
SVHS-SWITCH
PAL / NTSC DECODER
Q-Y MATRIX SAT CONTROL
RGB-INPUT SWITCH
SOUND TRAP
CVBS
TDA 4661
OUT
IN
R G B BL


CN104
12P
:BTOB
1 SIF
2 SYSI (M/S)
3 EXTA MONO
4 GND
5 SCL
6 SDA
7 9 (V)
8 R-IN (VOL OUT)
9 GND
10 LIN (TV OUT)
11 GND
12 IF
TO A1 BOARD
CN1201
TO C BOARD
FOCUS
TO PICTURE TUBE
HV
H1
GND
200V
1000V
CN851
4P
VHT
:MINI
TO C BOARD
CN701

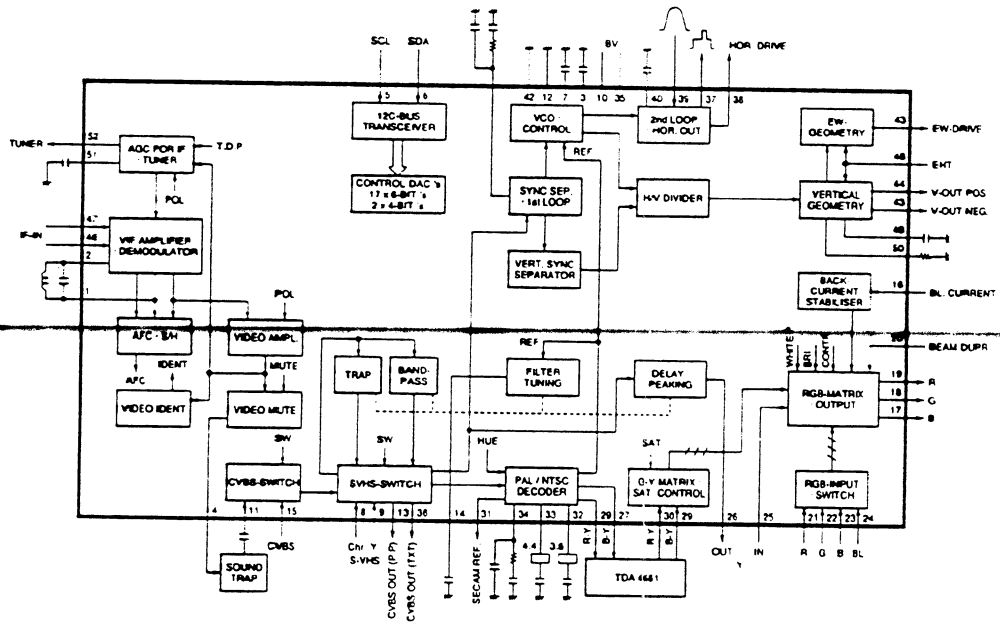
A BOARD * MARK LIST

	KV-G25M1(ME)	KV-G25M1(HK)	KV-G25M1(RUSS)	KV-G25M11
CN106	NOT USED	NOT USED	NOT USED	12P : BTOB
CN601	TO POWER CORD	TO POWER CORD	TO F1 BOARD CN1602	TO POWER CORD
F601	T3.15A	T3.15A	NOT USED	T3.15A
FB801	1.1uH	1.1uH	1.9uH	1.1uH
JR103	NOT USED	NOT USED	NOT USED	0 : CHIP
JW032	NOT USED	NOT USED	15MM	NOT USED
JW132	NOT USED	NOT USED	15MM	NOT USED
Q302	NOT USED	NOT USED	NOT USED	2SC2412K
R020	NOT USED	NOT USED	NOT USED	100 : CHIP
R316	NOT USED	NOT USED	NOT USED	4.7K : CHIP
R317	NOT USED	NOT USED	NOT USED	1K : CHIP
R327	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R328	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R329	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R334	NOT USED	NOT USED	NOT USED	470 : CHIP
R552	NOT USED	NOT USED	220K : CHIP	220K : CHIP
R553	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R570	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R635	NOT USED	NOT USED	NOT USED	22 2W :RS

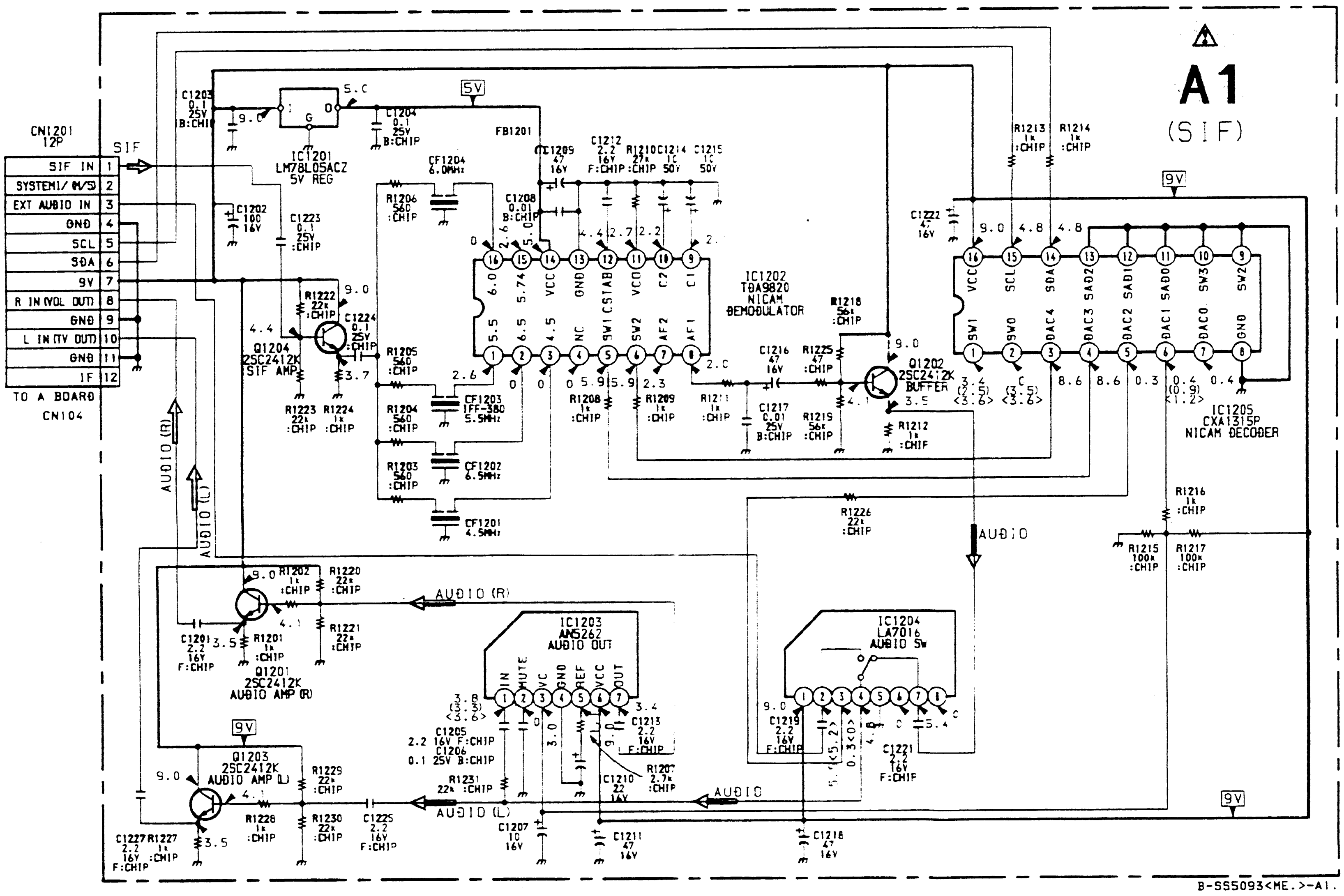
A BOARD IC351 TDA4665T

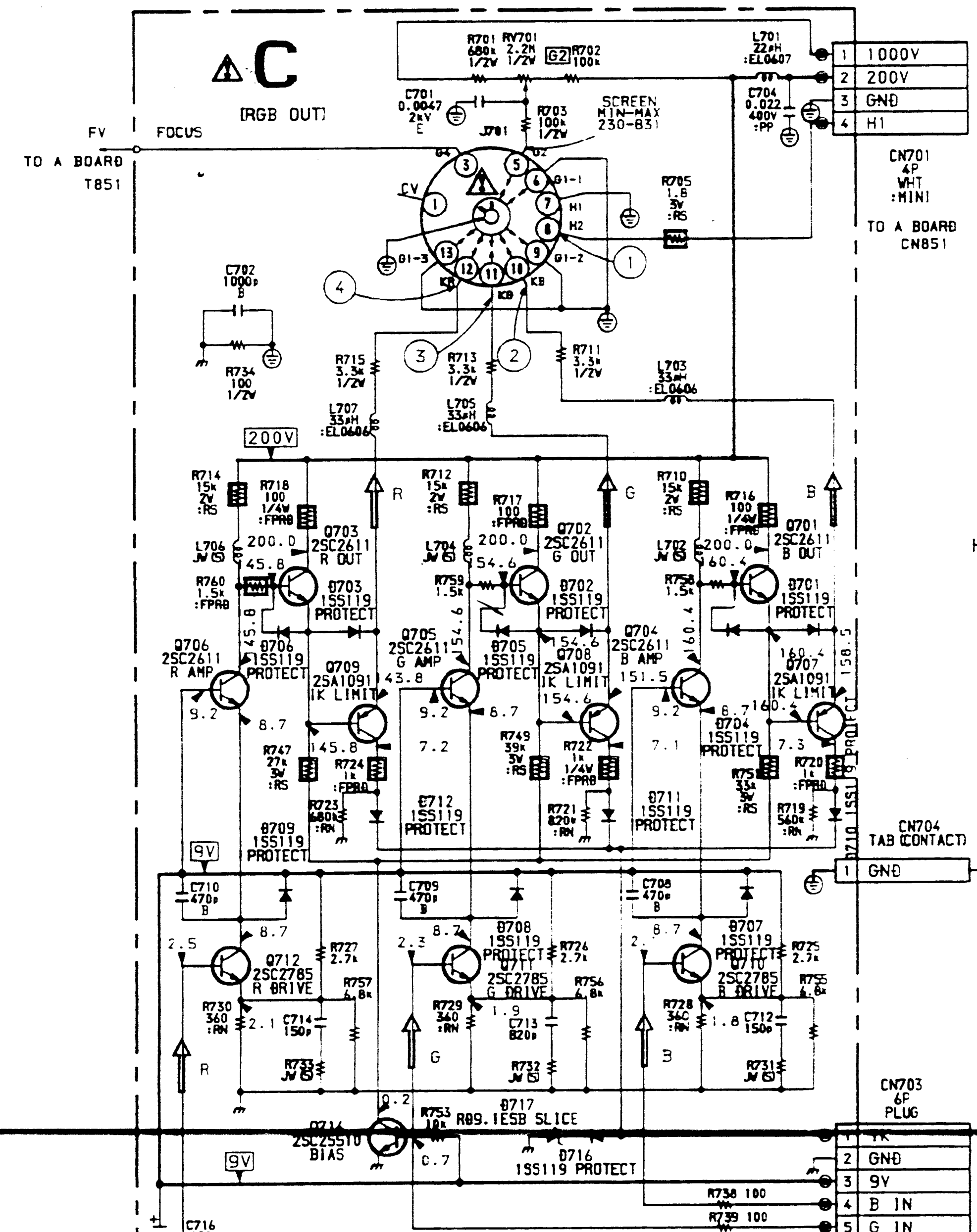

±(R-Y)
16
SIGNAL CLAMPING
LINE MEMORY
SAMPLE-AND-HOLD
LP
11
±(R-Y)
colour-difference input signals
pre-amplifiers
addition stages
output buffers
colour-difference output signals
±(B-Y)
14
SIGNAL CLAMPING
LINE MEMORY
SAMPLE-AND-HOLD
LP
12
±(B-Y)
V P1
9
analog supply
2 n.c
6 n.c.
13 n.c
15 n.c
7 i.c
TDA4665
3MHz shifting clock
sandcastle pulse input
5
SANDCASTLE DETECTOR
FREQUENCY PHASE DETECTOR
DIVIDER BY 192
LP
3MHz CCO
DIVIDER BY 2
10
digital supply
1
3
4, 8
GND1
V P2
GND2

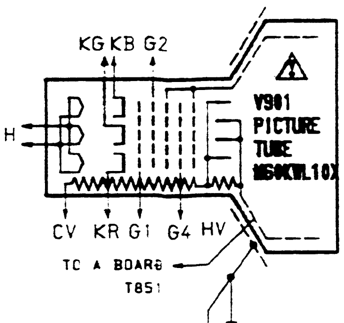
A BOARD IC300 TDA8366N3D


SCL
SDA
8V
HOR DRIVE
5
6
42 12 7 3 10 35
40 36 37 38
12C-BUS TRANSCEIVER
CONTROL DAC 's 17 x 6-BIT 's 2 x 4-BIT 's
VCO CONTROL
2nd LOOP HOR. OUT
REF
SYNC SEP. 1st LOOP
H-V DIVIDER
VERT. SYNC SEPARATOR
EW-GEOMETRY
VERTICAL GEOMETRY
43 EW-DRIVE
46 EHT
44 V-OUT POS
43 V-OUT NEG
48
50
BACK CURRENT STABILISER
16 BL. CURRENT
BEAM DUPR
TUNER
52
51
AGC FOR IF TUNER
T.D.P
POL
47
IF-IN
46
2
VIF AMPLIFIER DEMODULATOR
1
POL
AFC - S/H
VIDEO AMPL.
IDENT
AFC
MUTE
VIDEO IDENT
VIDEO MUTE
TRAP
BAND-PASS
REF
FILTER TUNING
DELAY PEAKING
WHITE
BRI
CONT
RGB-MATRIX OUTPUT
19 R
18 G
17 B
SW
SW
HUE
SAT
CVBS-SWITCH
SVHS-SWITCH
PAL / NTSC DECODER
G-Y MATRIX SAT CONTROL
RGB-INPUT SWITCH
4 11 15
8 9 13 36
14 31 34 33 32 29 27
30 29
26 25
21 22 23 24
SOUND TRAP
CVBS
Chr Y S-VHS
CVBS OUT (P P)
CVBS OUT (TXT)
SECAM REF.
4.4
3.6
R-Y
B-Y
R-Y
B-Y
TDA 4661
OUT
IN
Y
R G B BL

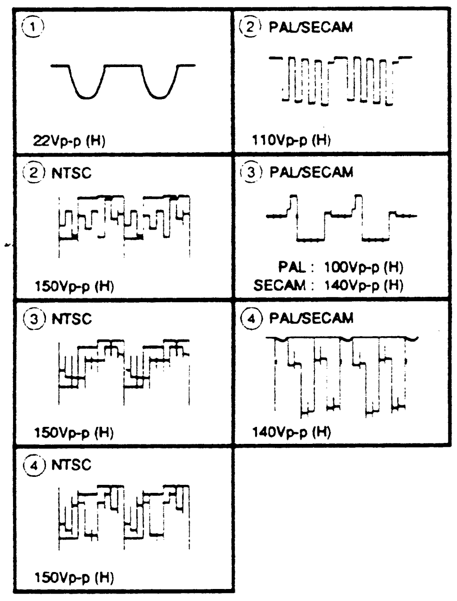
(2) Schematic Diagrams of A1, C, F1 and V1 Boards

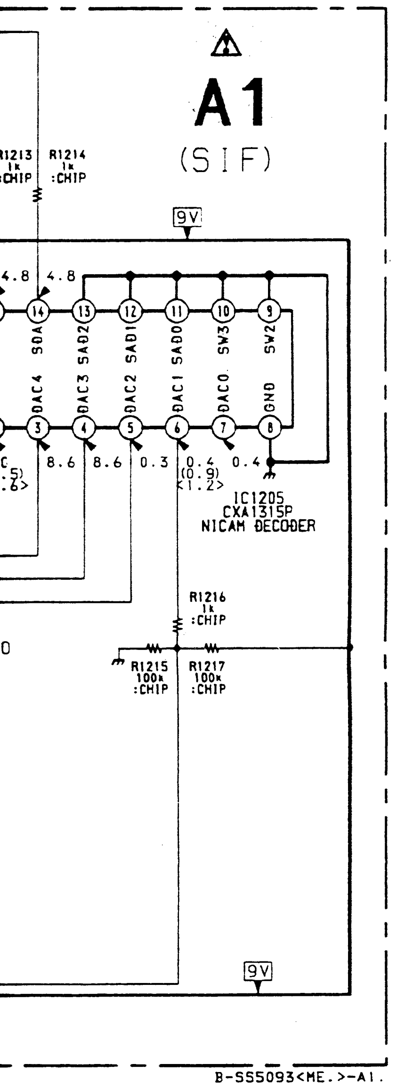

A1
(SIF)
CN1201 12P
SIF IN
SYSTEMI/ M/S
EXT AUDIO IN
GND
SCL
SDA
9V
R IN (VOL OUT)
GND
L IN (TV OUT)
GND
IF
TO A BOARD CN104
IC1201 LM78L05ACZ 5V REG
IC1202 TDA9820 NICAM DEMODULATOR
IC1205 CXA1315P NICAM DECODER
Q1204 2SC2412K SIF AMP
Q1202 2SC2412K BUFFER
Q1201 2SC2412K AUDIO AMP (R)
Q1203 2SC2412K AUDIO AMP (L)
IC1203 AN5262 AUDIO OUT
IC1204 LA7016 AUDIO SW
CF1201 4.5MHz
CF1202 6.5MHz
CF1203 TFF-380 5.5MHz
CF1204 6.0MHz
AUDIO (R)
AUDIO (L)
AUDIO
B-SS5093<ME.>-A1.


C
(RGB OUT)
FV
FOCUS
TO A BOARD T851
CN701 4P WHT :MINI
TO A BOARD CN851
1000V
200V
GND
H1
SCREEN MIN-MAX 230-831
Q703 2SC2611 R OUT
Q702 2SC2611 G OUT
Q701 2SC2611 B OUT
Q706 2SC2611 R AMP
Q705 2SC2611 G AMP
Q704 2SC2611 B AMP
Q709 2SA1091 IK LIMIT
Q708 2SA1091 IK LIMIT
Q707 2SA1091 IK LIMIT
Q712 2SC2785 R DRIVE
Q711 2SC2785 G DRIVE
Q710 2SC2785 B DRIVE
Q714 2SC2510 BIAS
D717 RB9.1ESB SLICE
D716 1SS119 PROTECT
CN704 TAB (CONTACT)
CN703 6P PLUG
TO A BOARD CN103
IK
GND
9V
B IN
G IN
R IN
B-SS5093<ME.>-C..

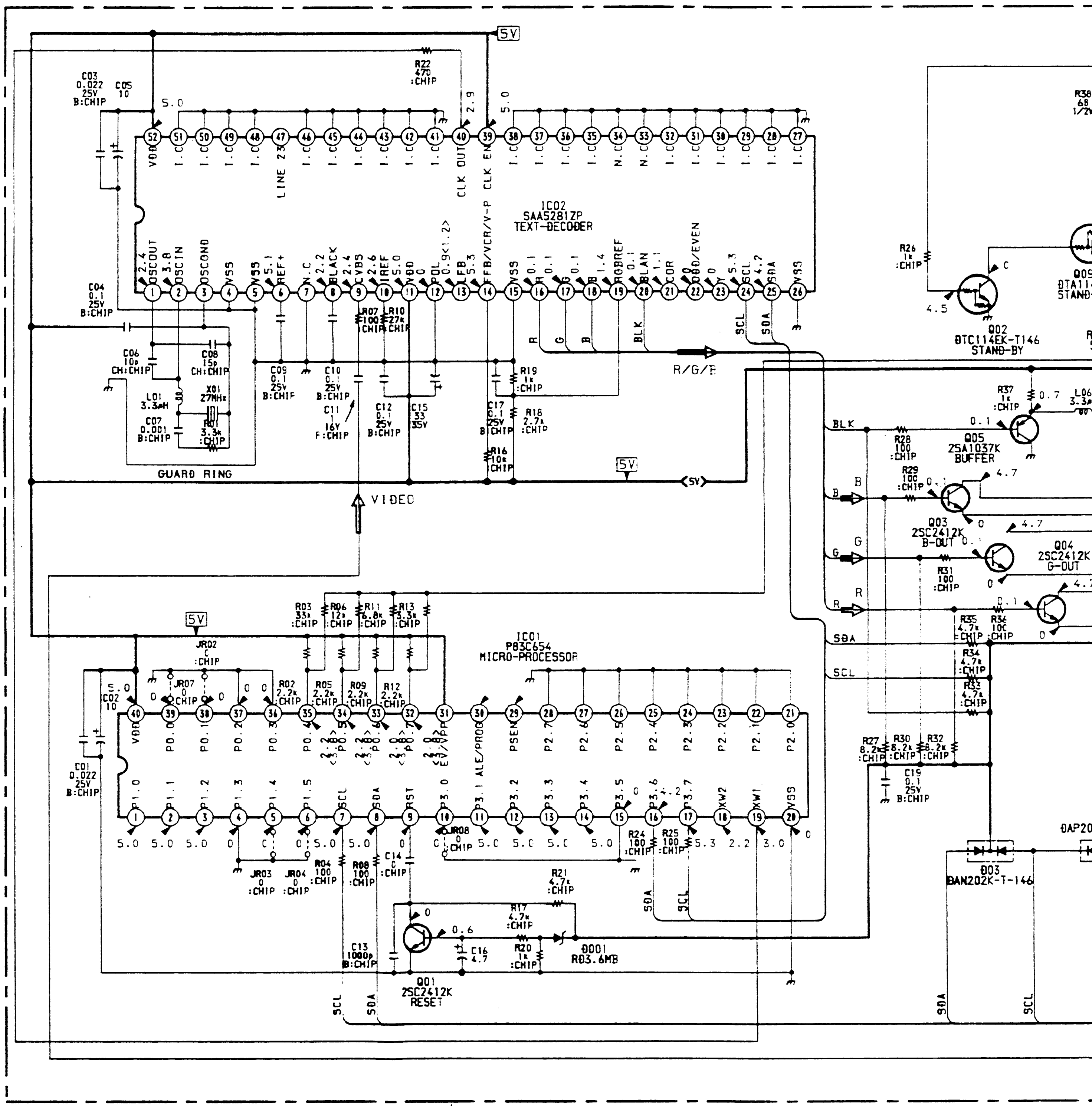

KG KB G2
H
V901 PICTURE TUBE M50KWL10X
CV KR G1 G4 HV
TO A BOARD T851

C BOARD WAVEFORMS

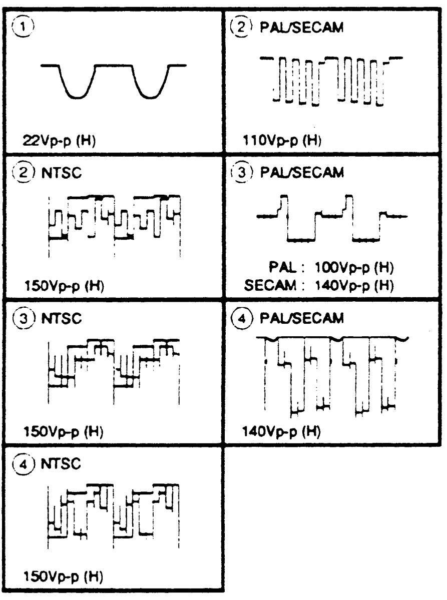



A1
(SIF)
R1213 1k :CHIP
R1214 1k :CHIP
9V
IC1205
CXA1315P
NICAM DECODER
SDA
SAD2
SAD1
SAD0
SW3
SW2
DAC4
DAC3
DAC2
DAC1
DAC0
GND
R1216 1k :CHIP
R1215 100k :CHIP
R1217 100k :CHIP
9V
B-SS5093<ME.>-A1.

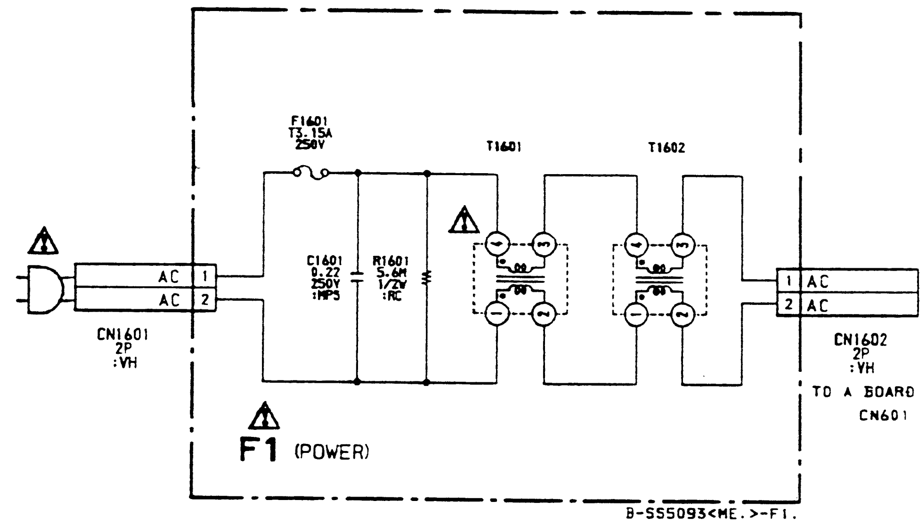
(KV-G25M11 only)


5V
R22 470 :CHIP
C03 0.022 25V B:CHIP
C05 10
IC02
SAA5281ZP
TEXT-DECODER
VDD
LINE 23
CLK OUT
CLK EN
OSCOUT
OSCIN
OSCGND
VSS
REF+
N.C
BLACK
CVBS
IREF
SAND
POL
LFB
FB/VCR/V-P
ODD/EVEN
COR
BLAN
ROBREF
SCL
SDA
C04 0.1 25V B:CHIP
C06 10p CH:CHIP
C08 15p CH:CHIP
L01 3.3μH
X01 27MHz
C07 0.001 B:CHIP
R01 3.3k :CHIP
GUARD RING
C09 0.1 25V B:CHIP
C10 0.1 25V B:CHIP
C11 1 16V F:CHIP
C12 0.1 25V B:CHIP
C15 33 35V
R07 100 :CHIP
R10 27k :CHIP
C17 0.1 25V B:CHIP
R19 1k :CHIP
R18 2.7k :CHIP
R16 10k :CHIP
VIDEO
R/G/B
BLK
5V
IC01
P83C654
MICRO-PROCESSOR
JR02 0 :CHIP
R03 33k :CHIP
R06 12k :CHIP
R11 6.8k :CHIP
R13 3.3k :CHIP
R02 2.2k :CHIP
R05 2.2k :CHIP
R09 2.2k :CHIP
R12 2.2k :CHIP
JR07 0 :CHIP
C02 10
C01 0.022 25V B:CHIP
ALE/PROG
PSEN
XW2
XW1
VSS
JR03 0 :CHIP
JR04 0 :CHIP
R04 100 :CHIP
R08 100 :CHIP
C14 0 :CHIP
JR08 0 :CHIP
R24 100 :CHIP
R25 100 :CHIP
R21 4.7k :CHIP
R17 4.7k :CHIP
C13 1000p B:CHIP
C16 4.7
R20 1k :CHIP
D001 RD3.6MB
Q01 2SC2412K RESET
R26 1k :CHIP
Q02 DTC114EK-T146 STAND-BY
Q09 DTA114 STAND
R38 68 1/2W
R37 1k :CHIP
L06 3.3μ
Q05 2SA1037K BUFFER
R28 100 :CHIP
R29 100 :CHIP
Q03 2SC2412K B-OUT
Q04 2SC2412K G-OUT
R31 100 :CHIP
R35 4.7k :CHIP
R36 100 :CHIP
R34 4.7k :CHIP
R33 4.7k :CHIP
R27 8.2k :CHIP
R30 8.2k :CHIP
R32 8.2k :CHIP
C19 0.1 25V B:CHIP
D03 BAN202K-T-146
BLK
B
G
R
SDA
SCL

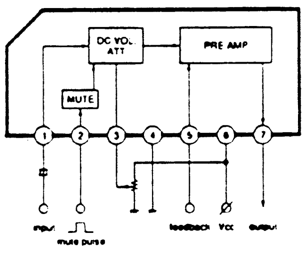
C BOARD WAVEFORMS

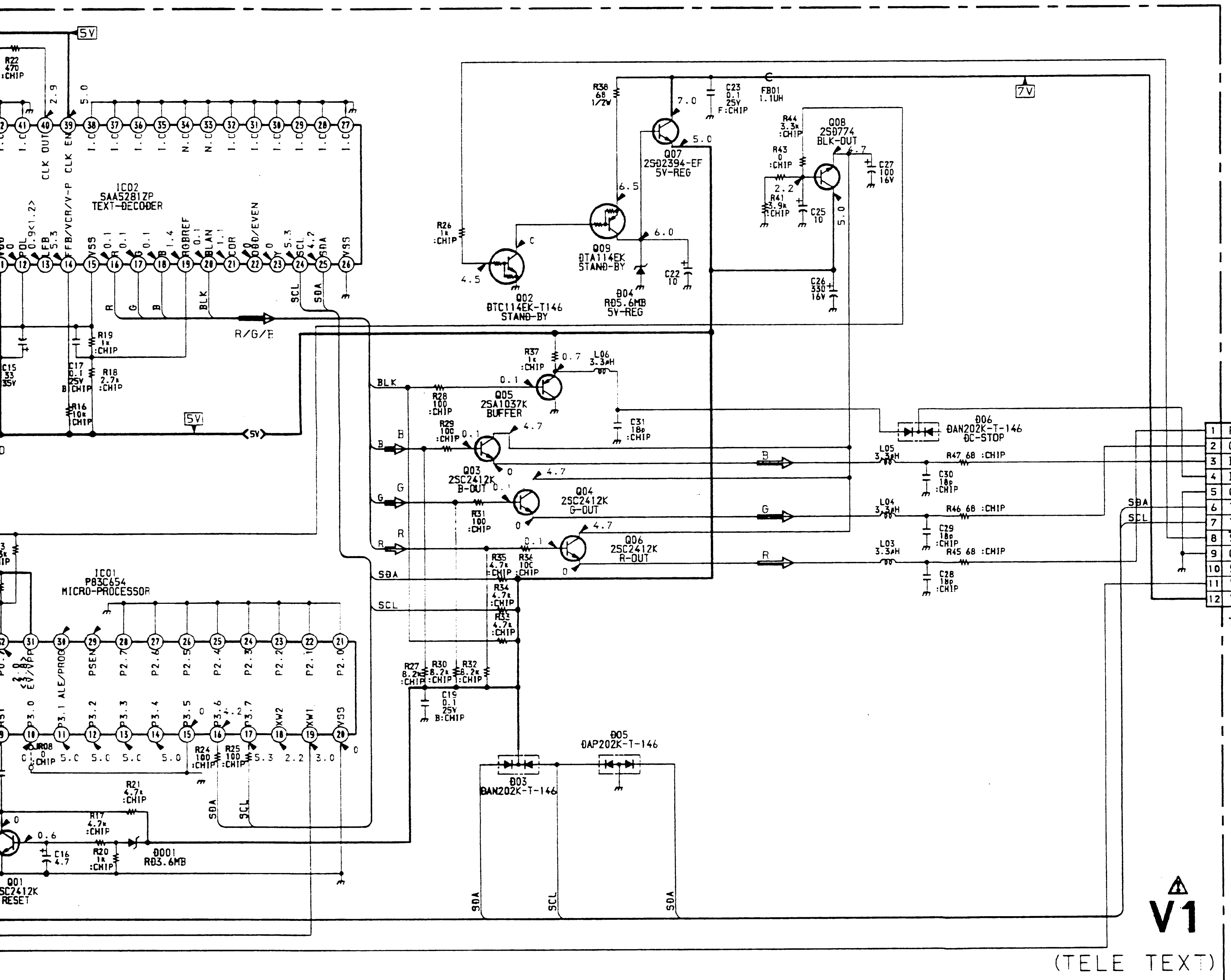


(KV-G25M1 (RUSS) only)

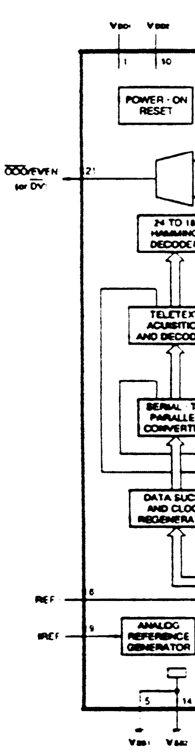

F1601 T3.15A 250V
T1601
T1602
C1601 0.22 250V :MPS
R1601 5.6M 1/2W :RC
AC 1
AC 2
CN1601 2P :VH
CN1602 2P :VH
TO A BOARD CN601
F1 (POWER)
B-SS5093<ME.>-F1.

A1 BOARD IC1203 AN5262


DC VOL. ATT
PRE AMP
MUTE
input
mute pulse
feedback
Vcc
output


IC02
SAA5281ZP
TEXT-DECODER
IC01
P83C654
MICRO-PROCESSOR
Q01
2SC2412K
RESET
Q02
DTC114EK-T146
STAND-BY
Q03
2SC2412K
B-OUT
Q04
2SC2412K
G-OUT
Q05
2SA1037K
BUFFER
Q06
2SC2412K
R-OUT
Q07
2SD2394-EF
5V-REG
Q08
2SB0774
BLK-OUT
Q09
DTA114EK
STAND-BY
D03
DAN202K-T-146
D04
RD5.6MB
5V-REG
D05
DAP202K-T-146
D06
DAN202K-T-146
DC-STOP
D001
RD3.6MB
FB01
1.1UH
5V
7V
R/G/B
BLK
SDA
SCL
CN01
12P
:BTOB
1 R
2 G
3 B
4 BLK
5 GND
6 TEXT SDA
7 TEXT SCL
8 ST-BY
9 GND
10 SSCP
11 VIDEO
12 7V
TO A BOARD
CN106
V1
(TELE TEXT)
B-SS5093<ME.>-V1.

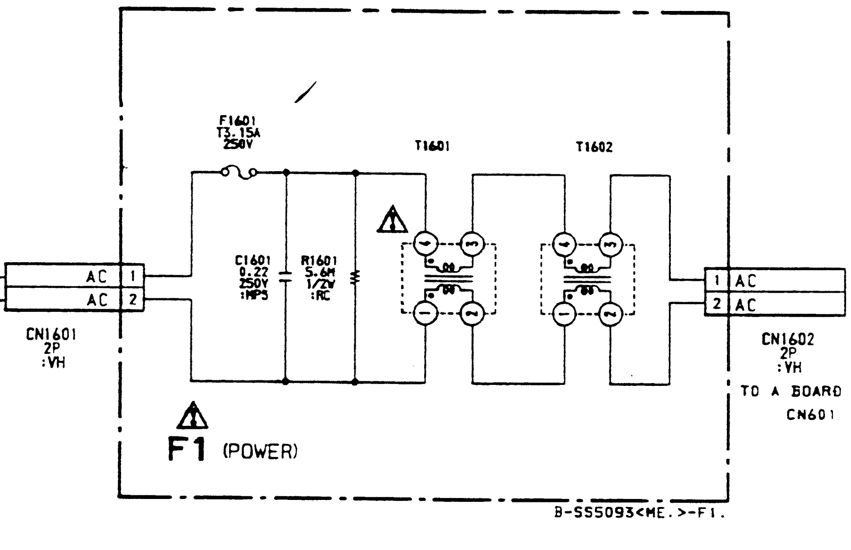
V1 BOAR

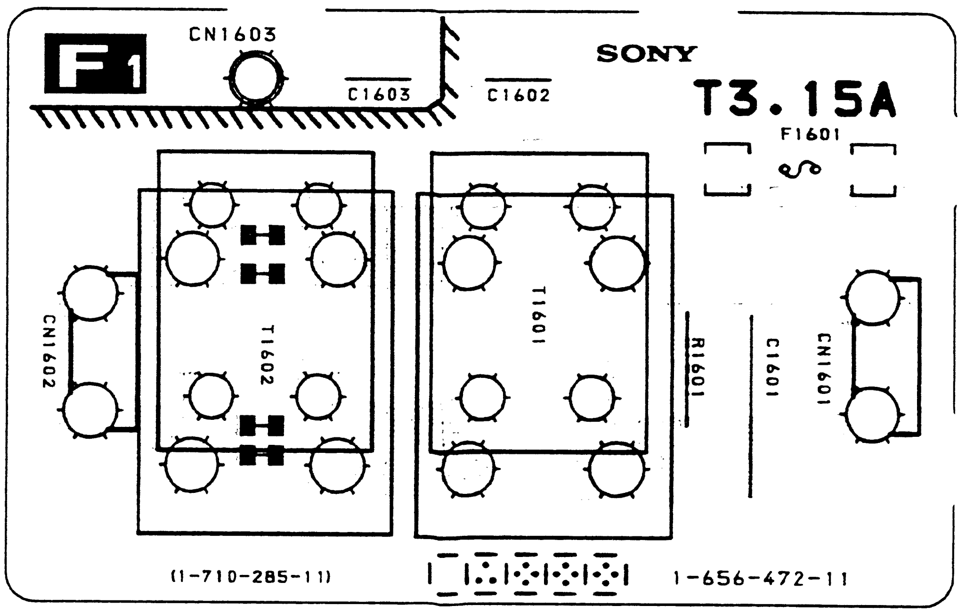

POWER-ON RESET
TELETEXT ACQUISITION AND DECODE
SERIAL TO PARALLEL CONVERTER
DATA SLICER AND CLOCK REGENERATION
ANALOG REFERENCE GENERATOR

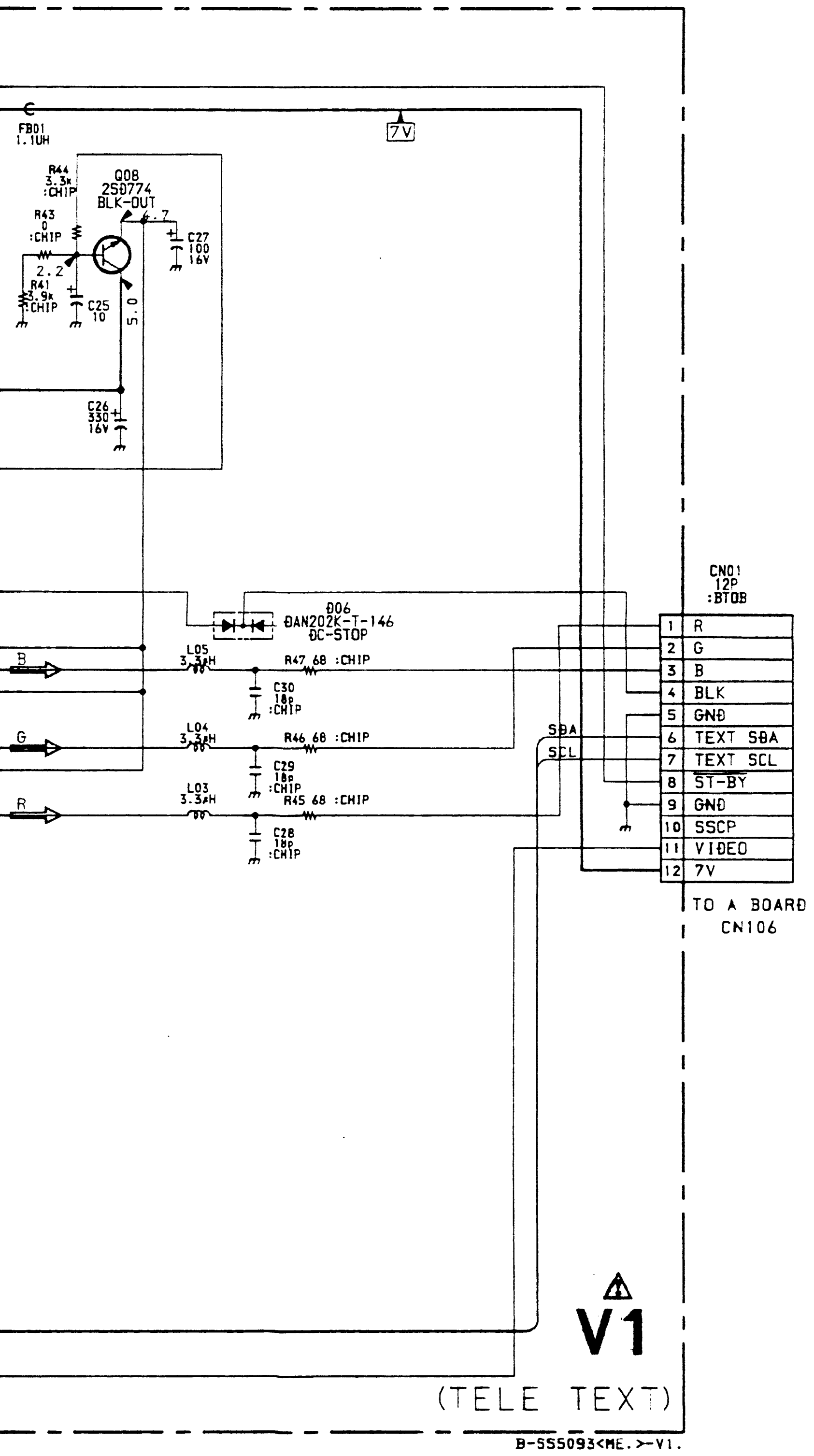
PRINTED WIRING BOARD **F1** [POWER]

– F1 Board – **(KV-G25M1 (RUSS) only)**

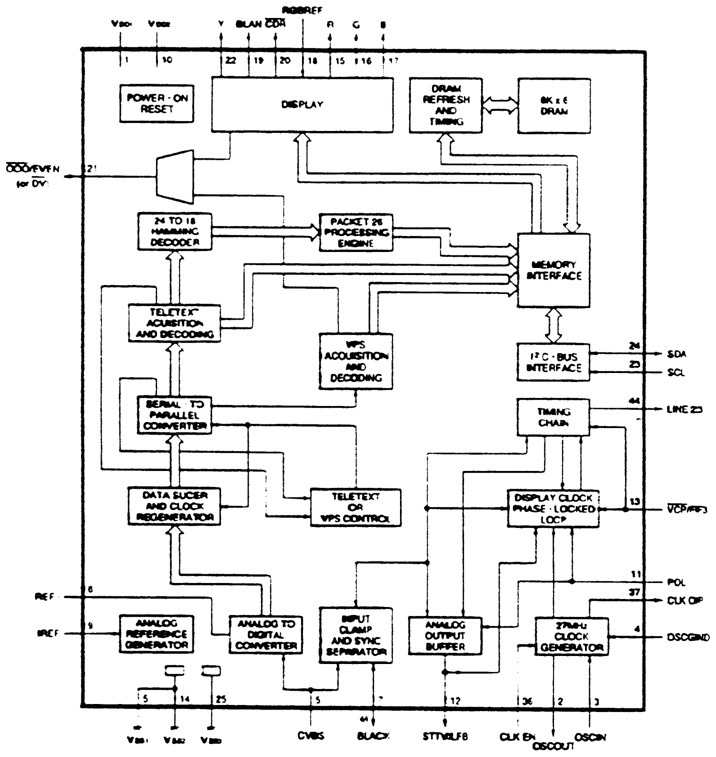
(KV-G25M1 (RUSS) only)


F1601
T3.15A
250V
T1601
T1602
C1601
0.22
250V
:MPS
R1601
5.6M
1/2W
:RC
AC 1
AC 2
CN1601
2P
:VH
1 AC
2 AC
CN1602
2P
:VH
TO A BOARD
CN601
F1 (POWER)
B-SS5093<ME.>-F1.


F1
CN1603
C1603
C1602
SONY
T3.15A
F1601
CN1602
T1602
T1601
R1601
C1601
CN1601
(1-710-285-11)
1-656-472-11

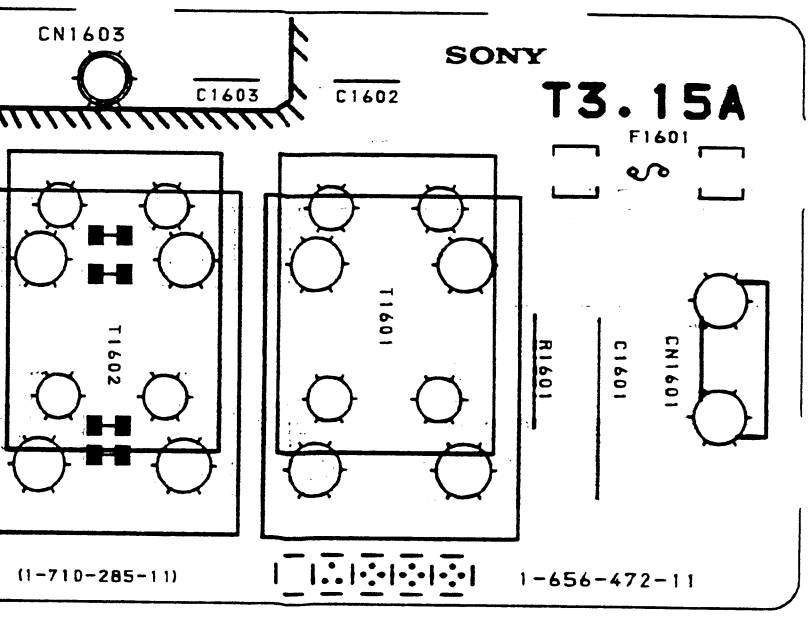

FB01
1.1UH
7V
R44
3.3k
:CHIP
Q08
2SD774
BLK-OUT
4.7
R43
0
:CHIP
C27
100
16V
2.2
R41
3.9k
:CHIP
C25
10
5.0
C26
330
16V
D06
DAN202K-T-146
DC-STOP
CN01
12P
:BTOB
L05
3.3μH
R47 68 :CHIP
C30
18p
:CHIP
L04
3.3μH
R46 68 :CHIP
C29
18p
:CHIP
L03
3.3μH
R45 68 :CHIP
C28
18p
:CHIP
B
G
R
SDA
SCL
1 R
2 G
3 B
4 BLK
5 GND
6 TEXT SDA
7 TEXT SCL
8 ST-BY
9 GND
10 SSCP
11 VIDEO
12 7V
TO A BOARD
CN106
V1
(TELE TEXT)
B-SS5093<ME.>-V1.

V1 BOARD IC02 SAA5281ZP


VDD1
VDD2
Y
BLAN
COR
RGBREF
R
G
B
1
10
22
19
20
18
15
16
17
POWER-ON RESET
DISPLAY
DRAM REFRESH AND TIMING
8K x 8 DRAM
ODD/EVEN (or DV)
21
24 TO 18 HAMMING DECODER
PACKET 26 PROCESSING ENGINE
MEMORY INTERFACE
TELETEXT ACUISITION AND DECODING
VPS ACQUISITION AND DECODING
I²C-BUS INTERFACE
24
SDA
23
SCL
SERIAL TO PARALLEL CONVERTER
TIMING CHAIN
44
LINE 23
DATA SLICER AND CLOCK REGENERATOR
TELETEXT OR VPS CONTROL
DISPLAY CLOCK PHASE-LOCKED LOOP
13
VCP/FIF3
11
POL
37
CLK O/P
REF
6
IREF
9
ANALOG REFERENCE GENERATOR
ANALOG TO DIGITAL CONVERTER
INPUT CLAMP AND SYNC SEPARATOR
ANALOG OUTPUT BUFFER
27MHz CLOCK GENERATOR
4
OSCGND
5
14
25
5
7
12
36
2
3
VSS1
VSS2
VSS3
CVBS
BLACK
STTVLFB
CLK EN
OSCOUT
OSCIN

IRING BOARD **F1** [POWER]

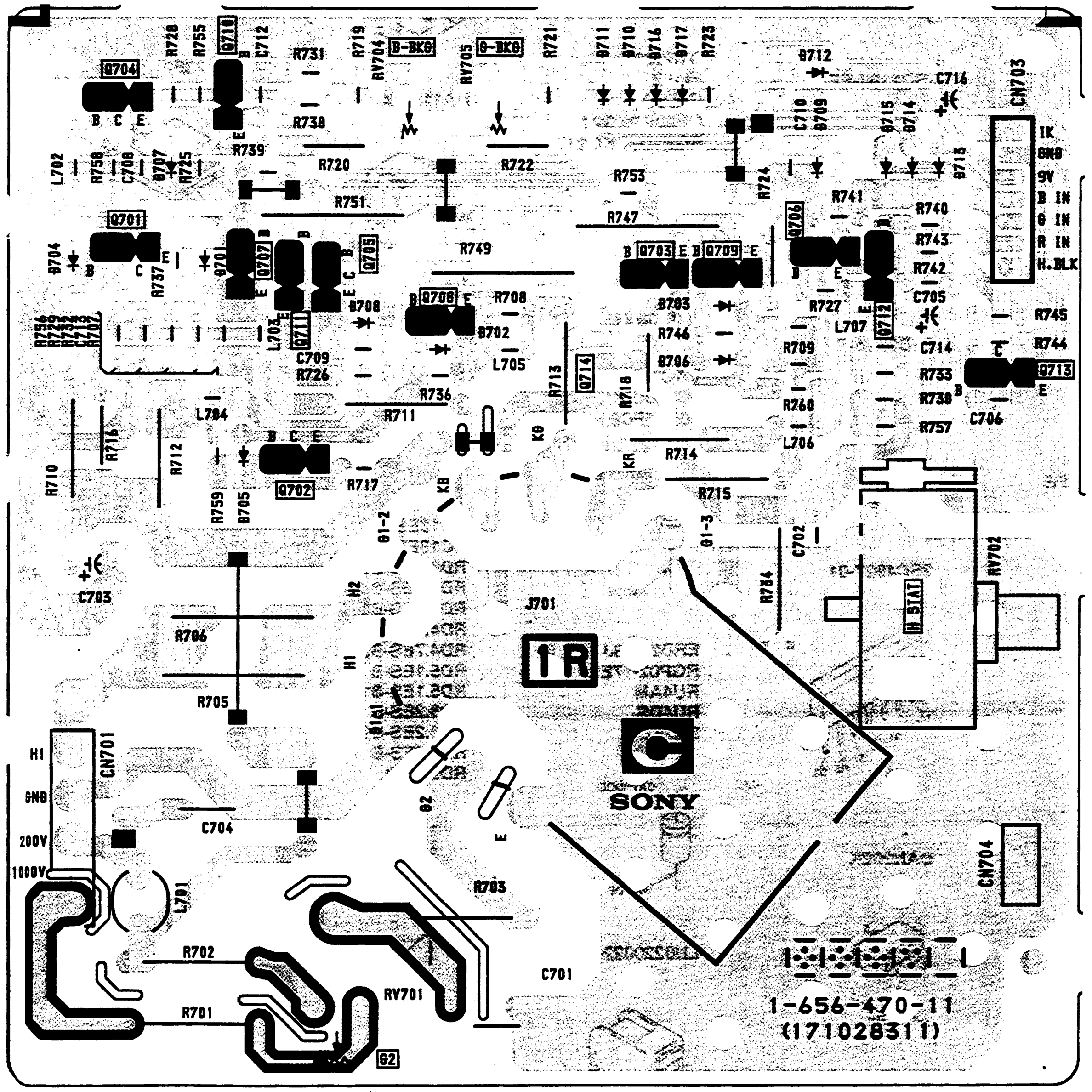
– (KV-G25M1 (RUSS) only)


CN1603
SONY
C1603
C1602
T3.15A
F1601
T1602
T1601
R1601
C1601
CN1601
(1-710-285-11)
1-656-472-11

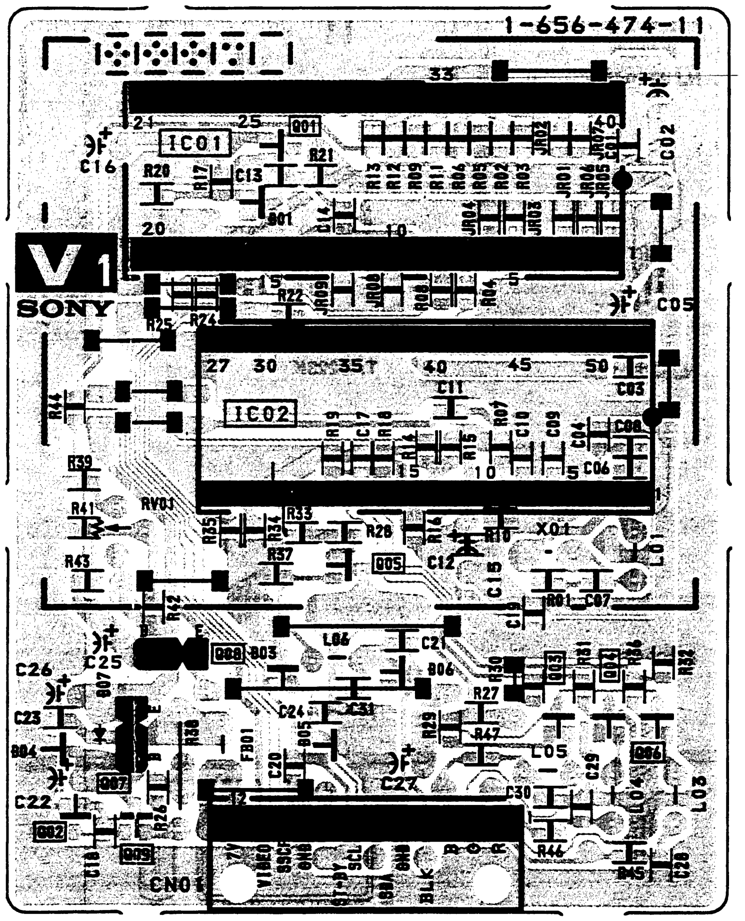
PRINTED WIRING BOARDS

A1 [SIF] **C** [RGB OUT] **V1** [TELE TEXT]

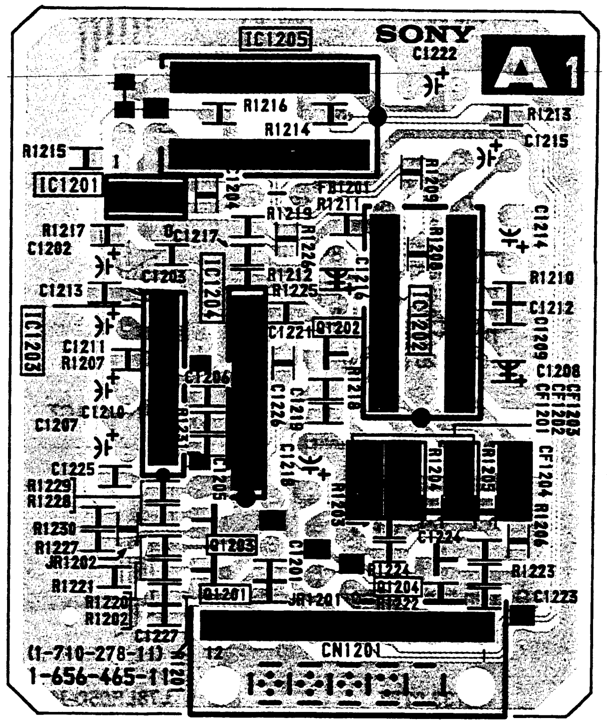
– C Board –


Q704
Q710
Q701
Q707
Q711
Q705
Q708
Q703
Q709
Q706
Q712
Q713
Q702
C712
R731
R738
R739
R720
R722
R751
R753
R747
R749
R741
R740
R743
R742
C705
R745
R744
R727
L707
R709
R760
L706
C714
R733
R738
R757
C706
R708
R702
L705
R746
R736
R711
R714
R715
R710
R712
L704
R717
C703
R706
R705
CN701
H1
GND
200V
1000V
C704
L701
R702
R701
RV701
R703
C701
C702
RV702
CN703
IK
GND
9V
B IN
G IN
R IN
H.BLK
CN704
J701
SONY
1-656-470-11
(17102831 1)

– V1 Board – (KV-G25M11 only)

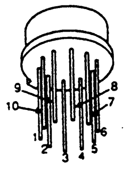

1-656-474-11
V1
SONY
IC01
IC02
Q01
Q05
Q08
Q03
Q04
Q06
Q07
Q02
Q09
C16
C02
C05
C03
C08
C06
C11
C12
C15
C21
C23
C22
C25
C26
C27
C30
C31
R44
R41
R43
RV01
X01
L01
L03
L05
L06
FB01
CN01
VIDEO
GND
BLK
B
G
R

– A1 Board –

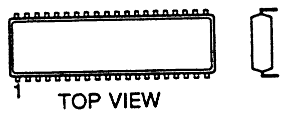

IC1205
SONY
A1
C1222
R1216
R1214
R1213
C1215
R1215
IC1201
IC1204
IC1203
IC1202
Q1202
Q1203
Q1201
Q1204
R1217
C1202
C1213
C1211
R1207
C1207
C1225
R1229
R1228
R1230
R1227
JR1202
R1221
R1220
R1202
C1227
C1214
R1210
C1212
C1208
CF1202
CF1201
C1204
R1206
R1223
C1223
CN1201
(1-710-278-11)
1-656-465-11

5-4. SEMICONDUCTORS

AN5262


1
2
3
4
5
6
7
8
9
10
11

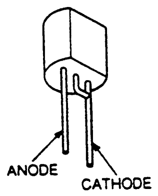
CAT24C04P (8PIN)
CXA1110BS (30PIN)
CXA1315P (16PIN)
CXP85116B-615S (64PIN)
CXP85224A-010S (64PIN)
P83C654 (40PIN)
SAA5281ZP (52PIN)
TDA4665T (16PIN)
TDA8366N3D (56PIN)
TDA8395T (20PIN)
TDA8424 (20PIN)
TDA9820 (16PIN)



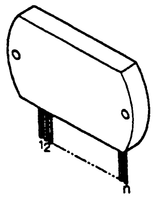
TOP VIEW

Dual In-line Package
Pin 6 ~ 98

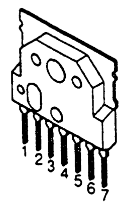
HZT33-02TE
µPC574J


ANODE
CATHODE

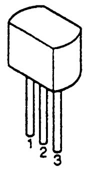
LA7016



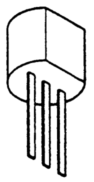
LA7830



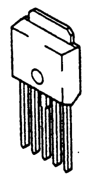
LA7910



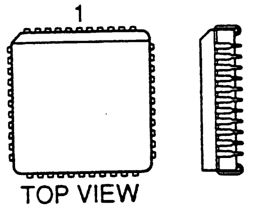
LM78L05ACZ



L78LR05D-MA



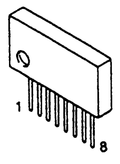
MSP3410 (44PIN)



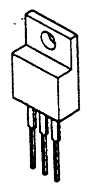
TOP VIEW

Quad Flat J-leaded Package
Pin 20 ~ 996

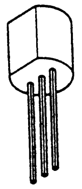
NJM2234L



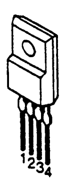
NJM7805FA



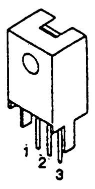
NJM78L12A



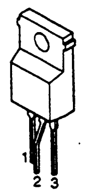
PQ09RE11



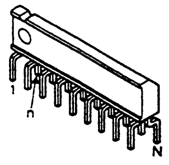
SBX1790-11
SBX1790-51



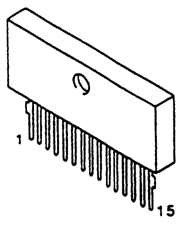
SE-135N



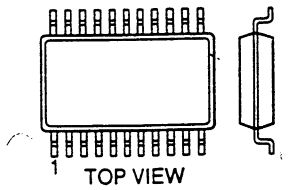
STR-S6708



TA8223K



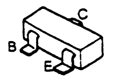
µPC4558G2 (8PIN)



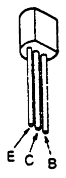
TOP VIEW

Small Outline L-leaded Package
Pin 8 ~ 98

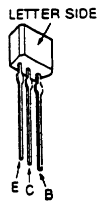
DTA114EK
DTC114EK
DTC143TK
DTC144EK
2SA1037K-QR
2SA1162-G
2SC1623-L5L6
2SC2412K-QR
2SC2712-YG



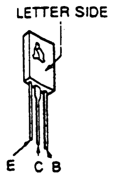
2SA1091
2SA1091-O
2SC2551-O



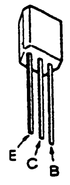
2SC2410SN
2SC2785-HFE


LETTER SIDE
E C B

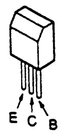
2SC2611


LETTER SIDE
E C B

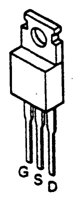
2SC2669-O



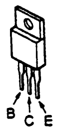
2SC3209LK
2SD774-34



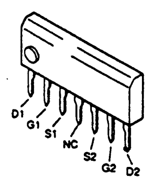
2SD2394-EF



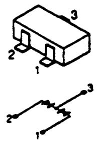
2SD2394-F



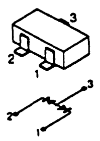
2SC4927-01


D1
G1
S1
NC
S2
G2
D2

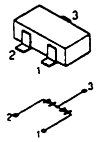
DAN202K



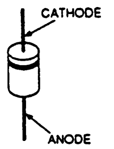
DAP202K



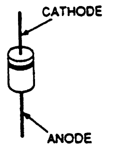
DA204K



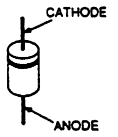
D1NL20
EL-1Z
GP08D
GP08DPKG23
RGP10GPKG23


CATHODE
ANODE

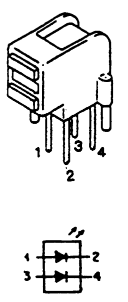
ERC06-15S
S3L20UF4
30DF6FC8


CATHODE
ANODE

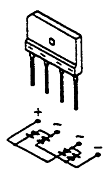
ERD29-08J
RGP02-17EL
RU4AM
RU4DS
31DF2


CATHODE
ANODE

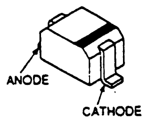
LN0220022G



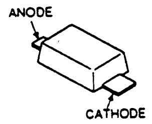
LN4SB60
RBV-406H



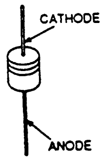
MA113-TX


ANODE
CATHODE

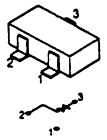
MA77-TX


ANODE
CATHODE

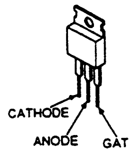
RD13ES-B
RD13ES-B2
RD2.2ES-B
RD3.6ES-B
RD3.6ES-B1
RD4.7ES-B
RD4.7ES-B2
RD5.1ES-B
RD5.1ES-B1
RD8.2ES-B
RD8.2ES-B2
RD9.1ES-B
RD9.1ESL


CATHODE
ANODE

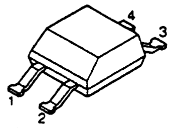
RD3.6M-B
RD3.6M-B1
RD5.6M-B
RD5.6M-B2



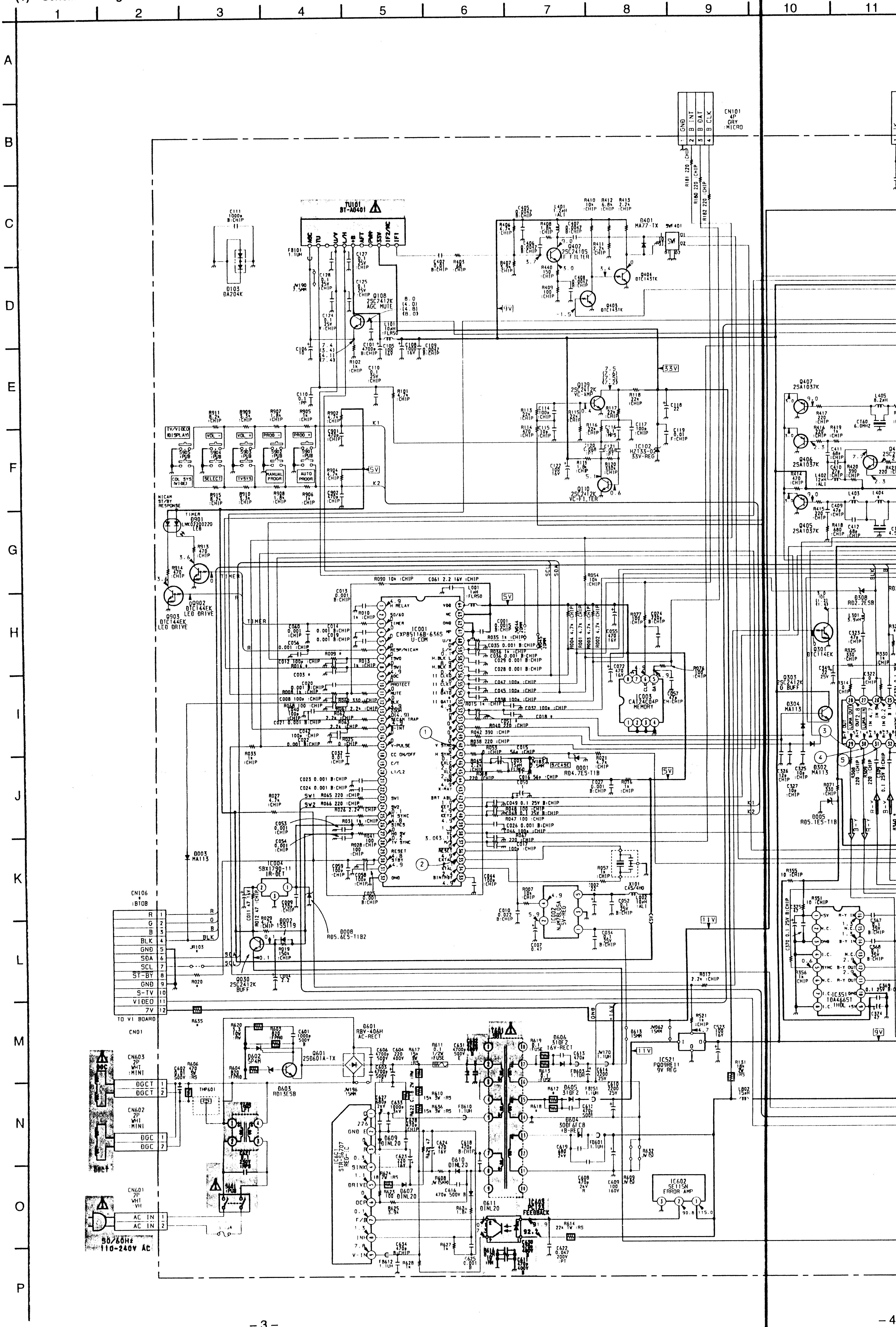
5P4M

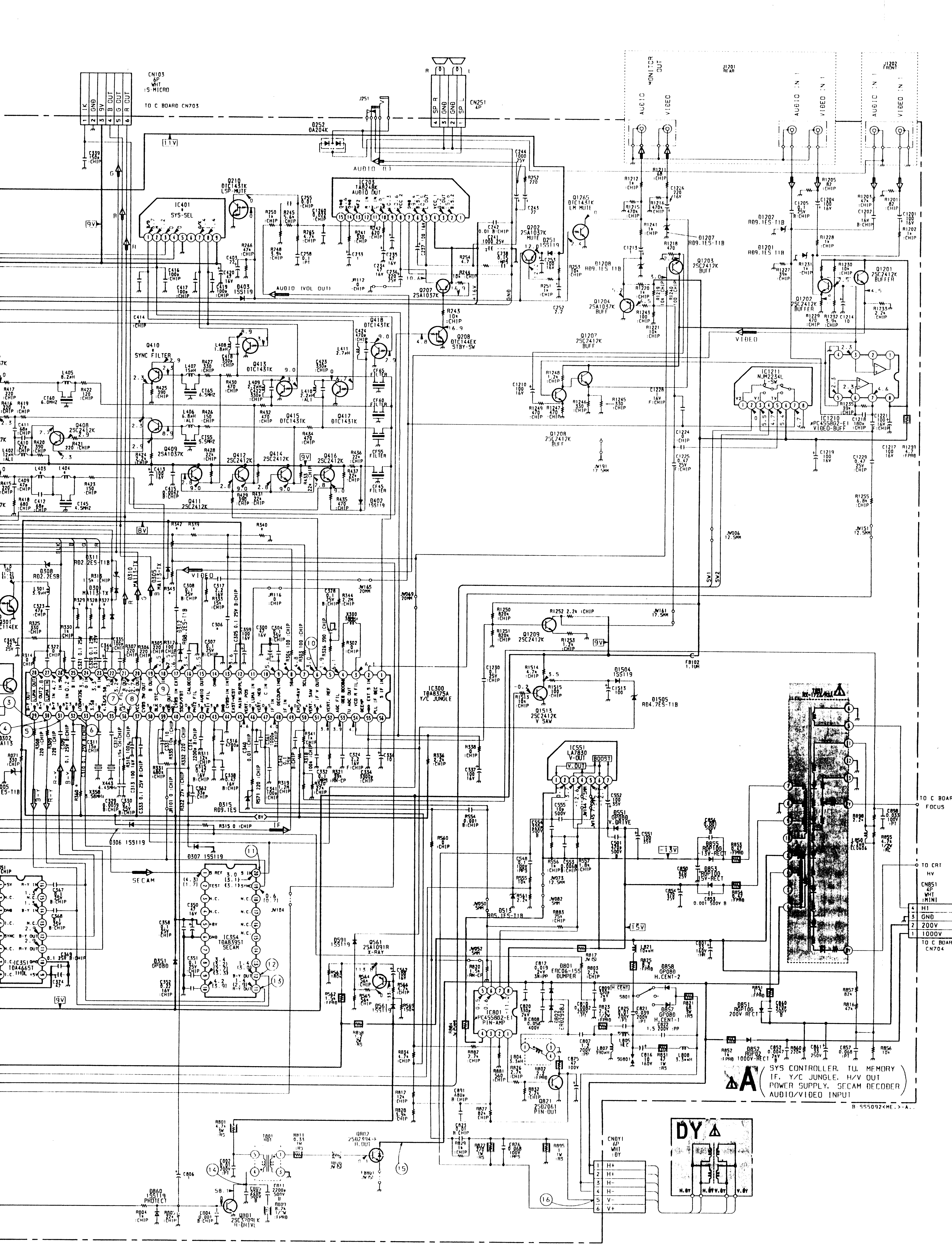

CATHODE
ANODE
GATE

PC123F2

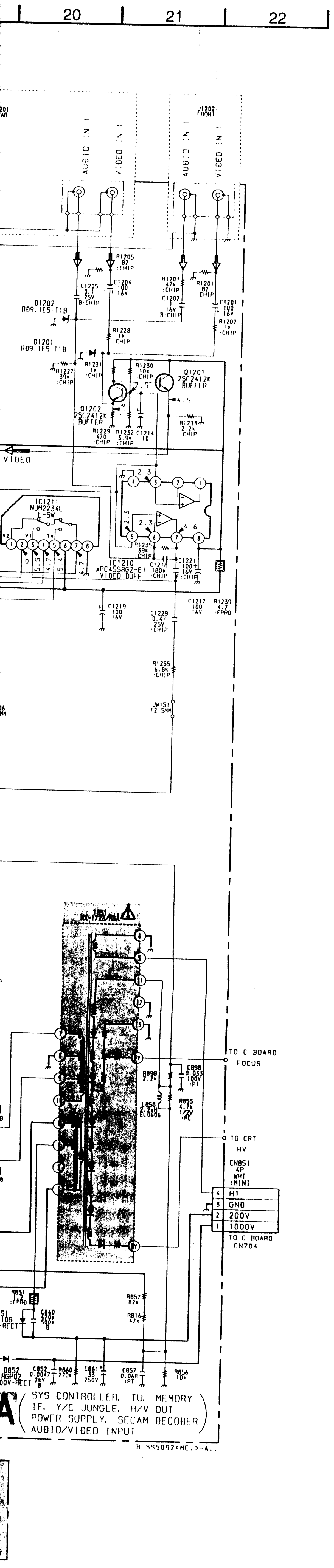


(1) **Schematic Diagram of A Board**


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
CN101 4P GRY :MICRO
GND
B INT
B DAT
B CLK
TU101 BT-A0401
AGC
TU
U/V
L/H
+B
AFT
PWM
33V
IF2/AC
IF1
D103 DA204K
Q108 2SC2412K AGC MUTE
L101 10μH :FLR50
Q402 2SC2410S IF FILTER
Q404 DTC143TK
Q403 DTC143TK
D401 MA77-TX
SW401
Q109 2SC2412K VC AMP
IC102 HZT33-02 33V-REG
Q110 2SC2412K VC-FILTER
33V
5V
9V
11V
TV/VIDEO (DISPLAY)
VOL -
VOL +
PROG -
PROG +
COL SYS (VIDE)
SELECT
TVSYS
MANUAL PROGR
AUTO PROGR
NICAM ST/BY RESPONSE
TIMER D901 LN02200220 LED
Q902 DTC144EK LED DRIVE
Q903 DTC144EK LED DRIVE
IC001 CXP85116B-636S U-COM
IC003 CA124C04P MEMORY
IC002 NJM78L05A 5V-REG
IC004 SBX1790-11 IR-DET
D003 MA113
D008 RD5.6ES-T1B2
Q030 2SC2412K BUFF
D001 RD4.7ES-T1B
X101 CAS/4MHz
CN106 :B10B
R
G
B
BLK
GND
SDA
SCL
ST-BY
GND
S-TV
VIDEO
7V
TO V1 BOARD
CN01
CN603 2P WHT :MINI
DGCT
DGCT
CN602 2P WHT :MINI
DGC
DGC
CN601 2P WHT VH
AC IN
AC IN
50/60Hz 110-240V AC
THP601
D601 RBV-406H AC-RECT
Q601 2SD601A-TX
D602 SP4H
D603 RD13ESB
IC601 STR-S6707 REG-CTL
D609 D1NL20
D610 D1NL20
D607 D1NL20
D611 D1NL20
T601
IC603 PC123 FEEDBACK
D606 31DF2 16V-RECT
D605 31DF2
D604 30DF6FC8 +B-RECT
IC521 PQ09RE11 9V REG
IC602 SE115N ERROR AMP
Q407 2SA1037K
Q406 2SA1037K
Q405 2SA1037K
Q301 DTC114EK
Q303 2SC2412K G BUFF
D304 MA113
D302 MA113
D308 RD2.2ESB
D005 RD5.1ES-T1B
IC351 TDA4665T 1HDL


CN103 6P WHT :S-MICRO
TO C BOARD CN703
1K
GND
9V
B OUT
G OUT
R OUT
CN251 4P
SP R
GND
GND
SP L
J251
D252 DA204K
AUDIO (L)
IC401 SYS-SEL
Q210 DTC143TK LSP-MUTE
IC203 TA8248K AUDIO OUT
Q207 2SA1037K
Q208 DTC144EK STBY-SW
Q202 2SA1037K MUTE
D251 1SS119
AUDIO (VOL OUT)
Q1265 DTC143TK LM MUTE
J1201 REAR
MONITOR OUT
AUDIO
VIDEO
AUDIO IN 1
VIDEO IN 1
J1202 FRONT
AUDIO IN 2
VIDEO IN 2
D1207 RD9.1ES-T1B
D1208 RD9.1ES-T1B
D1202 RD9.1ES-T1B
D1201 RD9.1ES-T1B
Q1203 2SC2412K BUFF
Q1204 2SA1037K BUFF
Q1201 2SC2412K BUFFER
Q1202 2SC2412K BUFFER
Q1207 2SC2412K BUFF
Q1208 2SC2412K BUFF
VIDEO
IC1211 NJM2234L 3-SW
IC1210 μPC4558G2-E1 VIDEO-BUFF
Q410 SYNC FILTER
Q408 2SC2412K
Q409 2SA1037K
Q411 2SC2412K
Q412 2SC2412K
Q413 DTC143TK
Q414 2SC2412K
Q415 DTC143TK
Q416 2SC2412K
Q417 DTC143TK
Q418 DTC143TK
CF65 FILTER
CF60 FILTER
CF55 FILTER
CF45 FILTER
D402 1SS119
D403 1SS119
Q308 RD2.2ESB
D311 RD2.2ES-T1B
D310 MA113-TX
D305 MA113-TX
Q301 DTC114EK
D302 MA113
VIDEO
IC300 TDA8375A Y/C JUNGLE
D315 RD9.1ES
D306 1SS119
D307 1SS119
IF
SECAM
IC354 TDA8395T SECAM
IC351 TDA4665T
D351 GP08D
Q1209 2SC2412K
Q1513 2SC2412K V SAW
D1504 1SS119
D1505 RD4.7ES-T1B
FB102 1.1UH
IC551 LA7830 V-OUT
V.OUT
BOOST
D551 GP08D V.DRIVE
D513 RD5.1ES-T1B
D591 1SS119
Q561 2SA1091R X-RAY
D561 1SS119
IC801 μPC4558G2-E1 PIN-AMP
D801 ERC06-15S DAMPER
D802 ERD29-08J
D858 GP08D H.CENT-2
D857 GP08D H.CENT-1
S801 H CENT
Q821 2SD2061 PIN OUT
D855 RGP10G 13V-RECT
D853 RGP10G 5V-RECT
D851 RGP10G 200V RECT
D852 RGP02 1000V-RECT
T851 FBT
TO C BOARD FOCUS
TO CRT HV
CN851 4P WHT :MINI
H1
GND
200V
1000V
TO C BOARD CN704
T801 HDT
Q802 2SD1914-1 H.OUT
Q801 2SC3209LK H.DRIVE
D860 1SS119 PHOTECT
CNDY1 6P WHT :DY
H+
H+
H-
H-
V-
V+
DY
H.DY
H.DY
V.DY
V.DY
B-SS5092<ME.>-A..

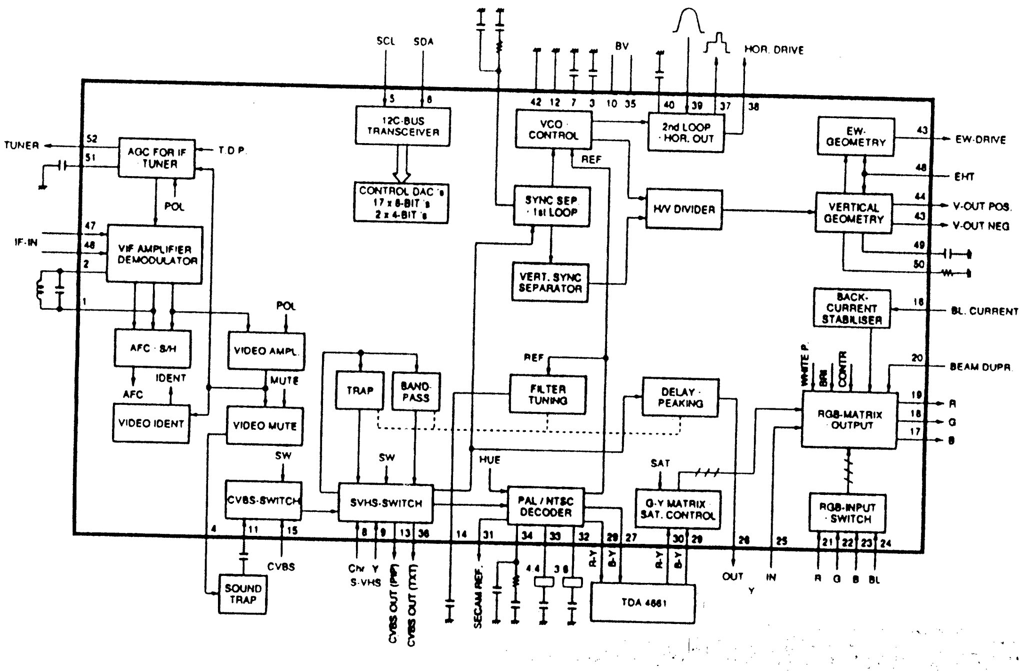
A (SYS CONTROLLER, TU, MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT)


20
21
22
J1202
FRONT
AUDIO IN 1
VIDEO IN 1
AUDIO IN 1
VIDEO IN 1
R1205
82
:CHIP
C1205
0.1
25V
B:CHIP
C1204
100
16V
R1203
47k
:CHIP
C1202
1
16V
B:CHIP
R1201
82
:CHIP
C1201
100
16V
R1202
1k
:CHIP
D1202
RD9.1ES-T1B
D1201
RD9.1ES T1B
R1228
1k
:CHIP
R1227
39k
:CHIP
R1231
1k
:CHIP
R1230
10k
:CHIP
Q1201
2SC2412K
BUFFER
Q1202
2SC2412K
BUFFER
R1229
470
:CHIP
R1232
3.9k
:CHIP
C1214
10
R1233
2.2k
:CHIP
VIDEO
IC1211
NJM2234L
L-SW
V2
V1
TV
IC1210
μPC4558G2-E1
VIDEO-BUFF
R1235
39k
:CHIP
C1218
180p
:CHIP
C1221
100
16V
:CHIP
C1219
100
16V
C1229
0.47
25V
:CHIP
C1217
100
16V
R1239
4.7
:FPRD
R1255
6.8k
:CHIP
JW151
12.5MM
TO C BOARD
FOCUS
C898
0.033
100V
:PT
R898
2.2k
L850
EL0606
R855
4.7k
1/2W
:RC
TO CRT
HV
CN851
4P
WHT
:MINI
4 HI
3 GND
2 200V
1 1000V
TO C BOARD
CN704
R851
:FPRD
C860
500V
B
R857
82k
R816
47k
D852
RGP02
C852
0.0047
B
R860
220k
C861
33
250V
C857
0.068
:PT
R856
10k
SYS CONTROLLER, TU. MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT
B-SS5092<ME.>-A..

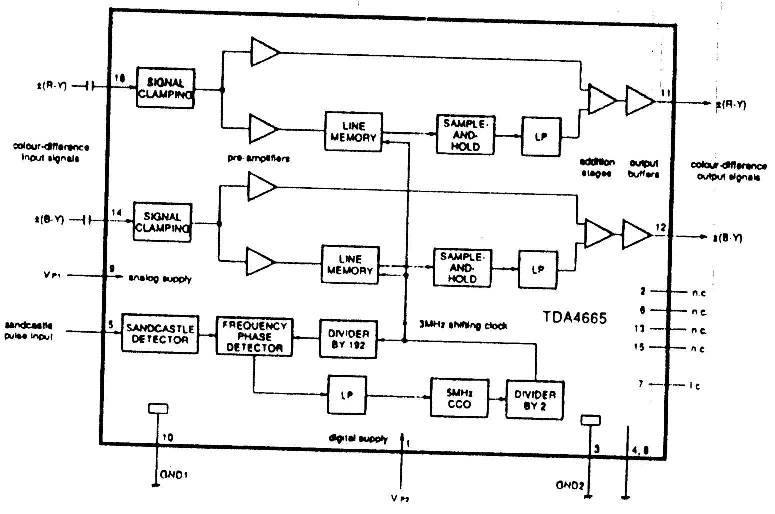
A BOARD ✻ MARK LIST

	KV-G25M1	KV-G25M11
C018	100 :CHIP	NOT USED
C051	NOT USED	100p :CHIP
C306	0.1 25V :CHIP	0 :CHIP
CN106	NOT USED	12P :B TO B
JR103	NOT USED	0 :CHIP
R020	NOT USED	100 :CHIP
R327	0 :CHIP	150 :CHIP
R328	0 :CHIP	150 :CHIP
R329	0 :CHIP	150 :CHIP
R339	300 :CHIP	NOT USED
R340	270 :CHIP	NOT USED
R342	NOT USED	300 :CHIP
R343	NOT USED	270 :CHIP
R612	0.47 :FPRD	0.1 :FUSE
R618	NOT USED	0.1 :FUSE
R635	NOT USED	22 2W :RS

A BOARD IC300 TDA8375A


SCL
SDA
BV
HOR. DRIVE
TUNER
T.D.P.
AGC FOR IF TUNER
POL
IF-IN
VIF AMPLIFIER DEMODULATOR
I2C-BUS TRANSCEIVER
CONTROL DAC's 17 x 6-BIT's 2 x 4-BIT's
VCO CONTROL
REF
2nd LOOP HOR. OUT
SYNC SEP. 1st LOOP
VERT. SYNC SEPARATOR
H/V DIVIDER
EW-GEOMETRY
VERTICAL GEOMETRY
EW-DRIVE
EHT
V-OUT POS.
V-OUT NEG
BACK-CURRENT STABILISER
BL. CURRENT
BEAM DUPR.
AFC S/H
AFC
IDENT
VIDEO IDENT
VIDEO AMPL.
MUTE
VIDEO MUTE
TRAP
BAND-PASS
FILTER TUNING
DELAY-PEAKING
WHITE P.
BRI
CONTR
RGB-MATRIX OUTPUT
R
G
B
SW
CVBS-SWITCH
SVHS-SWITCH
HUE
PAL / NTSC DECODER
SAT
G-Y MATRIX SAT. CONTROL
RGB-INPUT SWITCH
SOUND TRAP
CVBS
C/V Y S-VHS
CVBS OUT (PIP)
CVBS OUT (TXT)
SECAM REF.
4.4
3.6
R-Y
B-Y
TDA 4661
OUT
IN
Y
R G B BL

A BOARD IC351 TDA4665T


±(R-Y)
SIGNAL CLAMPING
colour-difference input signals
pre-amplifiers
LINE MEMORY
SAMPLE-AND-HOLD
LP
addition stages
output buffers
colour-difference output signals
±(B-Y)
SIGNAL CLAMPING
LINE MEMORY
SAMPLE-AND-HOLD
LP
VP1
analog supply
sandcastle pulse input
SANDCASTLE DETECTOR
FREQUENCY PHASE DETECTOR
DIVIDER BY 192
3MHz shifting clock
TDA4665
LP
6MHz CCO
DIVIDER BY 2
n.c.
n.c.
n.c.
n.c.
i.c.
GND1
digital supply
VP2
GND2

A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECORDER, AUDIO/VIDEO INPUT]

PRINTED WIRING BOARD

A BOARD

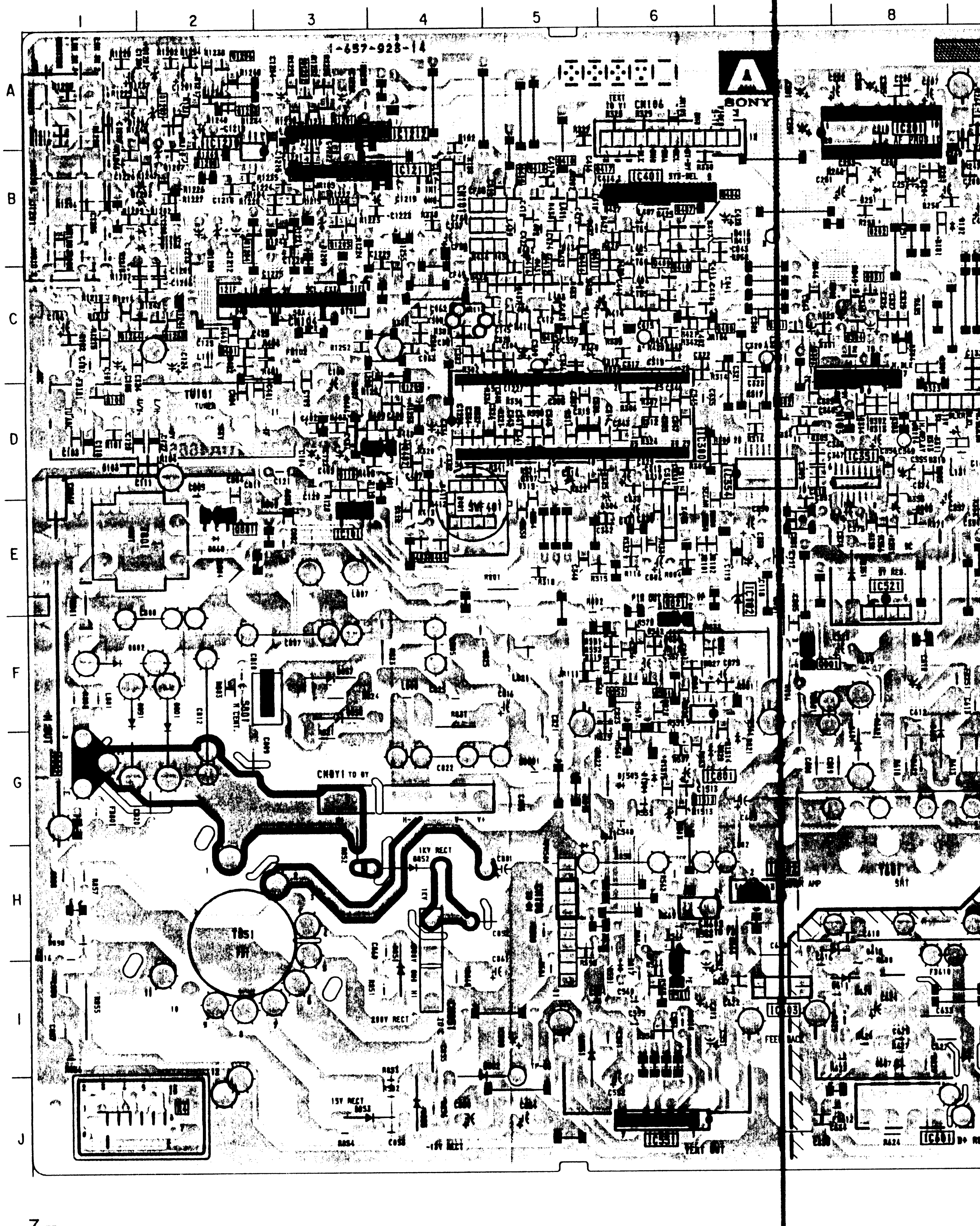
IC	
IC001	D-11
IC002	E-10
IC003	E-11
IC004	I-13
IC005	E-10
IC101	E-3
IC102	E-7
IC201	A-8
IC202	B-10
IC203	B-10
IC300	D-6
IC351	D-8
IC354	D-7
IC401	B-6
IC521	E-8
IC551	J-6
IC601	J-8
IC602	H-7
IC603	I-7
IC801	G-6
IC1210	A-2
IC1211	B-3
IC1212	A-3

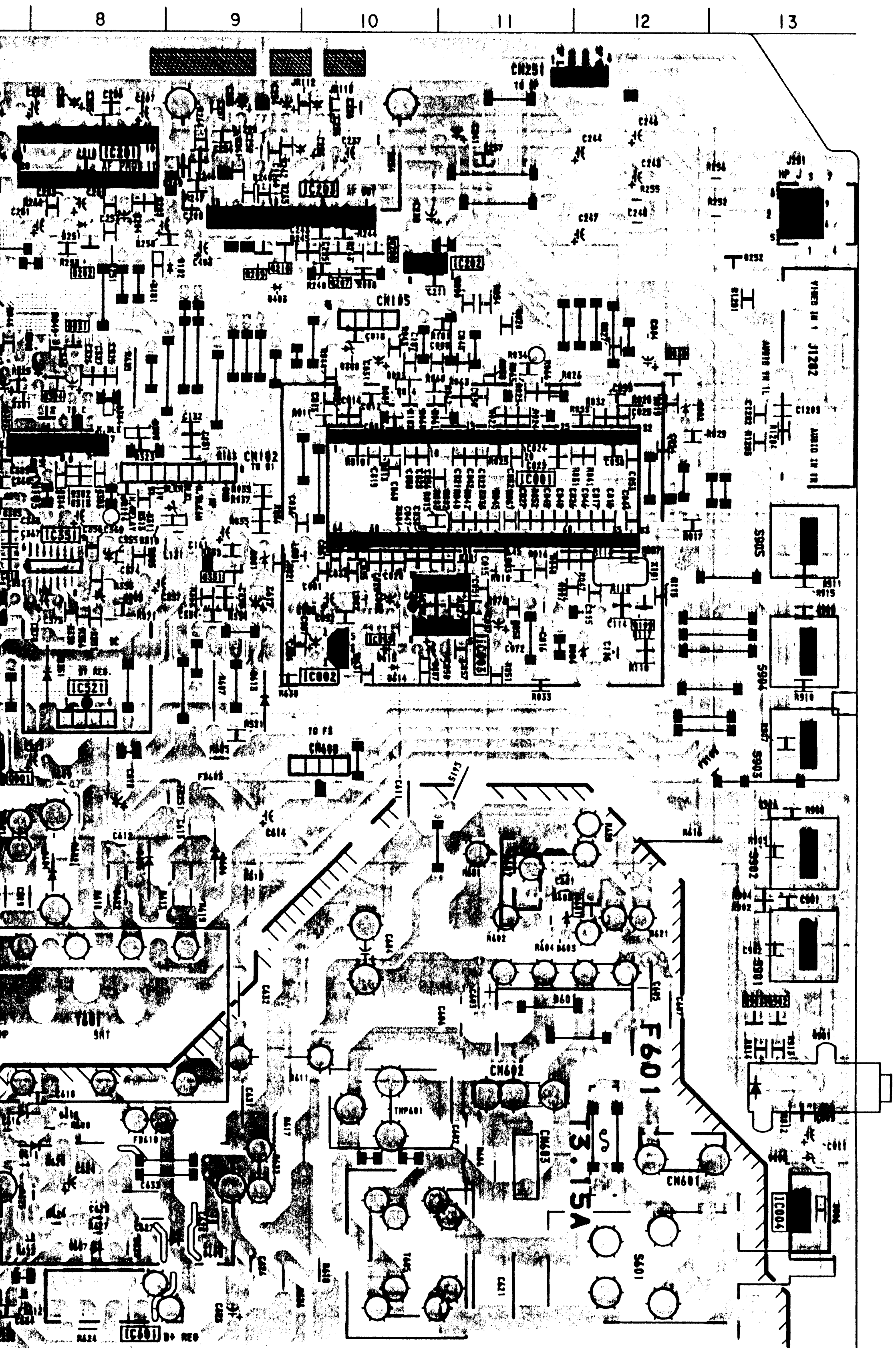
TRANSISTOR	
Q001	F-7
Q030	C-12
Q031	C-8
Q108	D-1
Q109	E-12
Q110	D-3
Q202	B-8
Q207	B-10
Q208	B-10
Q209	B-9
Q210	B-9
Q301	C-7
Q302	D-7
Q303	C-7
Q304	C-8
Q351	D-9
Q401	C-2
Q402	D-4
Q403	E-4
Q404	E-4
Q405	C-5
Q406	B-6
Q407	B-6
Q408	C-6
Q409	C-6
Q410	B-6
Q411	B-5
Q412	C-5
Q413	B-5
Q414	C-5
Q415	B-5
Q416	C-5
Q417	B-5
Q418	B-5
Q551	F-6
Q552	F-6
Q561	I-6
Q601	G-12
Q801	E-2
Q802	G-1
Q821	F-6
Q902	H-13
Q903	H-13
Q1201	A-3
Q1202	A-3
Q1203	A-2
Q1204	B-2
Q1205	B-3
Q1206	A-2
Q1207	A-2
Q1208	B-2
Q1209	D-4
Q1264	C-1
Q1265	C-2
Q1513	G-6

DIODE	
D001	D-9
D002	C-12
D003	C-10
D004	E-12
D005	E-8
D006	I-13
D007	E-10
D008	I-13
D101	B-8
D102	B-9
D103	D-1
D251	B-8
D252	B-13
D301	C-7
D302	D-8
D303	D-8
D304	C-8
D305	D-7
D306	E-6
D307	D-5
D308	C-10
D309	C-8
D310	D-9
D311	D-9
D312	C-5
D313	D-8
D314	D-8
D315	D-5
D351	E-8
D401	E-4
D402	B-5
D403	B-9
D513	G-6
D551	I-5
D561	H-5
D562	F-6
D581	H-5
D582	I-4
D591	I-6
D601	H-11
D602	G-11
D603	G-11
D604	G-8
D605	G-8
D606	G-9
D607	I-8
D609	I-9
D610	H-7
D611	I-7
D613	E-9
D614	E-10
D615	E-10
D801	F-2
D802	F-1
D820	G-6
D821	G-7
D851	H-4
D852	H-4
D853	J-3
D855	J-4
D857	F-3
D858	F-3
D860	E-2
D891	F-1
D901	H-13
D1201	A-2
D1202	B-2
D1203	B-2
D1204	A-2
D1205	B-2
D1206	B-2
D1207	B-2
D1208	B-2
D1209	B-3
D1504	G-6
D1505	G-6

Schematic diagram
← **A** board

– A Board –





8
9
10
11
12
13
CN201
IC201
IC202
CN105
CN102
IC601
IC602
CN600
J1202
S905
S904
S903
S902
S901
F601
T3.15A
CN601
CN602
S601
IC604
IC501

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

SECTION 7

EXPLODED VIEW

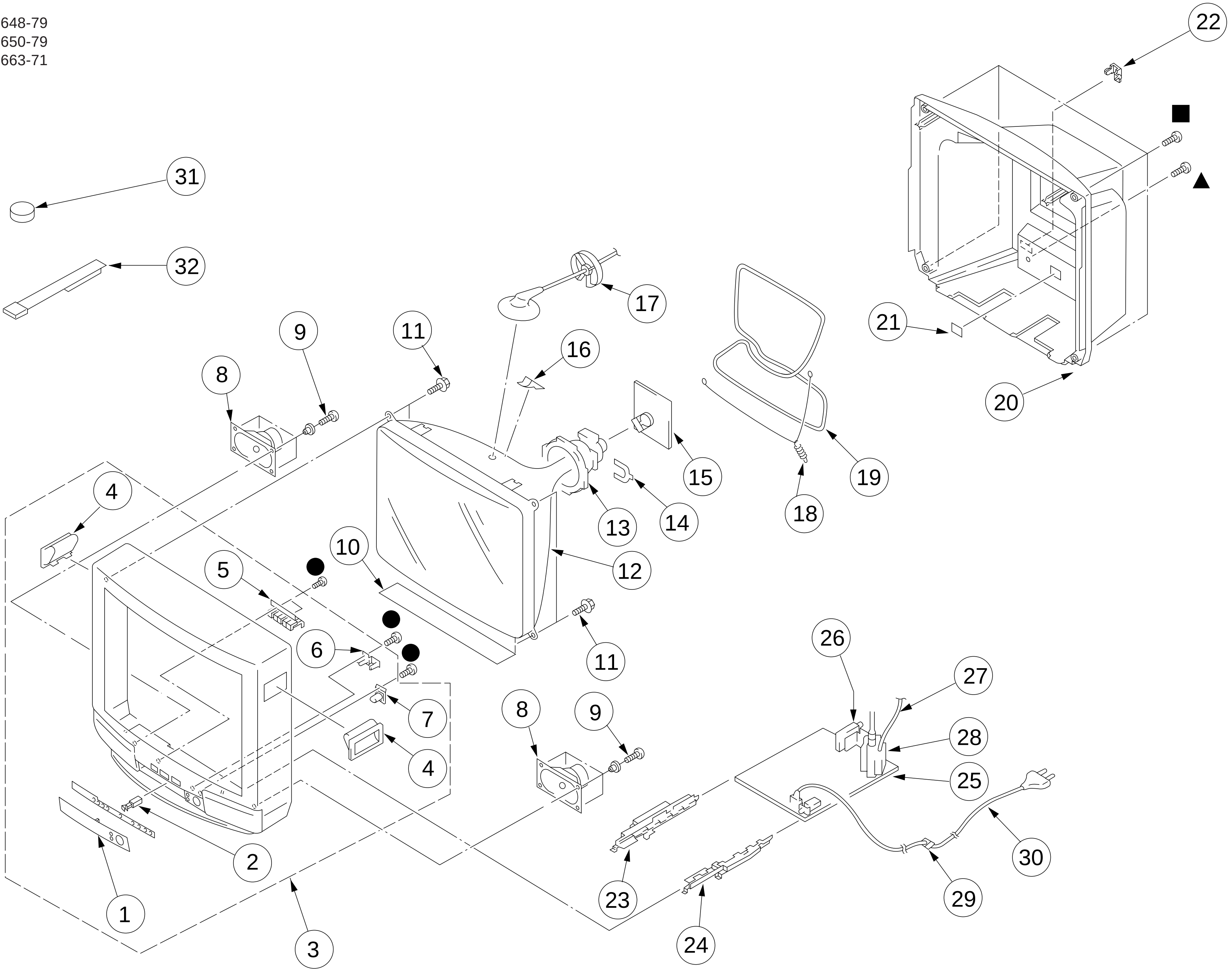
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS

●: BVTP3 × 12 7-685-648-79
▲: BVTP3 × 16 7-685-650-79
■: BVTP4 × 16 7-685-663-71



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-063-053-11	DOOR , CONTROL (PAINTING)	
2	4-627-936-01	LOCK, MINIATURE SIDE	
3	X-4035-506-2	BEZNET ASSY	1, 2, 4-7
4	4-048-691-11	HANDLE	
5	4-049-731-01	BUTTON, MULTIPLE	
6	4-049-730-01	GUIDE, LIGHT	
7	4-049-732-01	POWER, BUTTON,	
8	1-505-662-11	SPEAKER (5X12CM)	
9	4-043-388-11	SCREW, STEP TAPPING	
10	4-054-468-01	SHEET, BLOTTING	
11	4-365-808-01	SCREW (5), TAPPING	
12	⚠ 8-738-774-05	PICTURE TUBE (A51JUH71X)	
13	8-451-280-33	DEFLECTION YOKE (Y21PXA2)	
14	1-452-277-00	MAGNET, BMC	
15	* A-1331-800-A	C BOARD, COMPLETE	
16	4-046-600-11	SPACER, DY	
17	* 3-704-372-41	HOLDER, HV CABLE	
18	4-369-318-61	SPRING, TENSION	
19	⚠ 1-416-284-11	COIL, DEMAGNETIC	
20	⚠ 4-063-054-01	COVER, REAR	
21	4-049-416-11	BLIND, SHEET	
22	4-049-130-21	CLAMP, CODE	
23	* 4-048-690-02	RAIL (L), GUIDE	
24	* 4-048-689-02	RAIL (R), GUIDE	
25	* A-1298-512-A	A BOARD, COMPLETE	
26	8-598-323-30	TUNER, VSS BT-AG401	
27	⚠ 1-900-700-05	LEAD ASSY, FOCUS	
28	⚠ 1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)	
29	⚠ 4-389-778-31	HOLDER, AC CORD	
30	⚠ 1-782-452-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V	
31	1-452-032-00	MAGNET,DISC	
32	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	

SECTION 8
ELECTRICAL PARTS LIST

A

NOTE:

EMARK

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : μH, UH : μH

REF.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1298-512-A	A BOARD, COMPLETE *********************			
	* 1-580-798-11	CONNECTOR PIN (DY) 6P			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C001	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C002	1-126-965-11	ELECT	22MF	20%	50V
C004	1-125-800-51	ELECT	2.2MF	20%	63V
C007	1-125-798-51	ELECT	0.47MF	20%	63V
C009	1-102-824-00	CERAMIC	470PF	5%	50V
C010	1-136-157-00	FILM	0.022MF	5%	50V
C011	1-125-794-51	ELECT	47MF	20%	16V
C015	1-101-884-00	CERAMIC	56PF	5%	50V
C016	1-101-884-00	CERAMIC	56PF	5%	50V
C017	1-102-973-00	CERAMIC	100PF	5%	50V
C018	1-102-973-00	CERAMIC	100PF	5%	50V
C021	1-102-074-00	CERAMIC	0.001MF	10%	50V
C022	1-102-074-00	CERAMIC	0.001MF	10%	50V
C023	1-102-074-00	CERAMIC	0.001MF	10%	50V
C024	1-102-074-00	CERAMIC	0.001MF	10%	50V
C025	1-102-074-00	CERAMIC	0.001MF	10%	50V
C026	1-102-074-00	CERAMIC	0.001MF	10%	50V
C027	1-102-074-00	CERAMIC	0.001MF	10%	50V
C034	1-136-165-00	FILM	0.1MF	5%	50V
C042	1-102-973-00	CERAMIC	100PF	5%	50V
C044	1-102-973-00	CERAMIC	100PF	5%	50V
C046	1-102-973-00	CERAMIC	100PF	5%	50V
C048	1-136-165-00	FILM	0.1MF	5%	50V
C049	1-136-165-00	FILM	0.1MF	5%	50V
C050	1-126-960-11	ELECT	1MF	20%	50V
C051	1-102-973-00	CERAMIC	100PF	5%	50V
C052	1-136-165-00	FILM	0.1MF	5%	50V
C053	1-102-074-00	CERAMIC	0.001MF	10%	50V
C055	1-126-935-11	ELECT	470MF	20%	16V
C056	1-102-074-00	CERAMIC	0.001MF	10%	50V
C057	1-102-852-91	CERAMIC	47PF	5%	50V
C058	1-102-973-00	CERAMIC	100PF	5%	50V
C059	1-102-973-00	CERAMIC	100PF	5%	50V
C060	1-102-074-00	CERAMIC	0.001MF	10%	50V
C061	1-125-800-51	ELECT	2.2MF	20%	63V
C072	1-126-935-11	ELECT	470MF	20%	16V
C074	1-102-110-00	CERAMIC	220PF	10%	50V
C101	1-101-003-00	CERAMIC	0.0047MF		50V
C102	1-136-165-00	FILM	0.1MF	5%	50V
C105	1-125-806-51	ELECT	220MF	20%	16V
C106	1-125-797-51	ELECT	10MF	20%	50V
C108	1-125-807-51	ELECT	1000MF	20%	16V
C109	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C111	1-102-074-00	CERAMIC	0.001MF	10%	50V
C114	1-102-973-00	CERAMIC	100PF	5%	50V
C115	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C116	1-136-165-00	FILM	0.1MF	5%	50V
C117	1-102-973-00	CERAMIC	100PF	5%	50V
C118	1-126-965-11	ELECT	22MF	20%	50V
C119	1-136-153-00	FILM	0.01MF	5%	50V
C120	1-130-493-00	MYLAR	0.068MF	5%	50V
C121	1-130-493-00	MYLAR	0.068MF	5%	50V
C122	1-125-804-51	ELECT	100MF	20%	16V
C124	1-136-165-00	FILM	0.1MF	5%	50V
C125	1-136-165-00	FILM	0.1MF	5%	50V
C234	1-125-794-51	ELECT	47MF	20%	16V
C235	1-125-804-51	ELECT	100MF	20%	16V
C236	1-126-949-11	ELECT	220MF	20%	35V
C237	1-125-804-51	ELECT	100MF	20%	16V
C238	1-137-188-51	FILM	0.15MF	5%	50V
C241	1-125-813-51	ELECT	1000MF	20%	25V
C242	1-136-153-00	FILM	0.01MF	5%	50V
C243	1-125-797-51	ELECT	10MF	20%	50V
C244	1-125-813-51	ELECT	1000MF	20%	25V
C253	1-125-804-51	ELECT	100MF	20%	16V
C258	1-130-494-11	MYLAR	0.082MF	5%	50V
C300	1-125-794-51	ELECT	47MF	20%	16V
C304	1-136-165-00	FILM	0.1MF	5%	50V
C305	1-136-165-00	FILM	0.1MF	5%	50V
C306	1-136-165-00	FILM	0.1MF	5%	50V
C307	1-136-165-00	FILM	0.1MF	5%	50V
C308	1-136-165-00	FILM	0.1MF	5%	50V
C309	1-136-165-00	FILM	0.1MF	5%	50V
C310	1-136-165-00	FILM	0.1MF	5%	50V
C311	1-102-951-00	CERAMIC	15PF	5%	50V
C312	1-102-951-00	CERAMIC	15PF	5%	50V
C313	1-125-804-51	ELECT	100MF	20%	16V
C314	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C315	1-126-960-11	ELECT	1MF	20%	50V
C316	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C317	1-125-800-51	ELECT	2.2MF	20%	63V
C319	1-136-165-00	FILM	0.1MF	5%	50V
C320	1-136-165-00	FILM	0.1MF	5%	50V
C321	1-136-165-00	FILM	0.1MF	5%	50V
C323	1-101-880-00	CERAMIC	47PF	5%	50V
C324	1-125-800-51	ELECT	2.2MF	20%	63V
C325	1-102-947-00	CERAMIC	10PF	0.5PF	50V

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C326	1-102-949-00	CERAMIC	12PF	5%	50V
C327	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C328	1-136-153-00	FILM	0.01MF	5%	50V
C329	1-130-478-00	MYLAR	0.0039MF	5%	50V
C330	1-136-165-00	FILM	0.1MF	5%	50V
C331	1-125-797-51	ELECT	10MF	20%	50V
C332	1-136-165-00	FILM	0.1MF	5%	50V
C333	1-136-165-00	FILM	0.1MF	5%	50V
C334	1-102-123-00	CERAMIC	0.0033MF	10%	50V
C335	1-102-973-00	CERAMIC	100PF	5%	50V
C336	1-125-797-51	ELECT	10MF	20%	50V
C337	1-125-804-51	ELECT	100MF	20%	16V
C339	1-101-361-00	CERAMIC	150PF	5%	50V
C340	1-102-074-00	CERAMIC	0.001MF	10%	50V
C341	1-102-973-00	CERAMIC	100PF	5%	50V
C342	1-136-165-00	FILM	0.1MF	5%	50V
C344	1-125-797-51	ELECT	10MF	20%	50V
C349	1-125-797-51	ELECT	10MF	20%	50V
C359	1-125-804-51	ELECT	100MF	20%	16V
C361	1-102-074-00	CERAMIC	0.001MF	10%	50V
C362	1-162-211-31	CERAMIC	33PF	5%	50V
C367	1-136-165-00	FILM	0.1MF	5%	50V
C368	1-136-165-00	FILM	0.1MF	5%	50V
C369	1-136-165-00	FILM	0.1MF	5%	50V
C370	1-136-165-00	FILM	0.1MF	5%	50V
C374	1-126-967-11	ELECT	47MF	20%	50V
C375	1-126-967-11	ELECT	47MF	20%	50V
C402	1-136-153-00	FILM	0.01MF	5%	50V
C403	1-126-968-11	ELECT	100MF	20%	50V
C405	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C406	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C407	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C408	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C410	1-102-961-00	CERAMIC	27PF	5%	50V
C411	1-101-888-00	CERAMIC	68PF	5%	50V
C423	1-102-820-00	CERAMIC	330PF	5%	50V
C501	1-102-228-00	CERAMIC	470PF	10%	500V
C523	1-126-933-11	ELECT	100MF	20%	16V
C548	1-106-220-00	MYLAR	0.1MF	10%	100V
C551	1-126-948-11	ELECT	100MF	20%	35V
C552	1-126-948-11	ELECT	100MF	20%	35V
C553	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C554	1-102-244-00	CERAMIC	220PF	10%	500V
C555	1-101-804-00	CERAMIC	10PF	5%	500V
C562	1-126-933-11	ELECT	100MF	20%	16V
C602	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C603	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C604	1-117-752-11	ELECT(BLOCK)	330MF	20%	450V
C605	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C606	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C607	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608	1-104-332-11	CERAMIC	470PF	10%	2KV
C609	1-124-347-00	ELECT	100MF	20%	160V
C611 ⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C613	1-102-824-00	CERAMIC	470PF	5%	50V
C614	1-126-943-11	ELECT	2200MF	20%	25V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C616	1-102-228-00	CERAMIC	470PF	10%	500V
C618	1-102-114-00	CERAMIC	470PF	10%	50V
C621 ⚠	1-104-705-51	FILM	0.1MF	20%	250V
C622	1-107-368-11	MYLAR	0.047MF	99%	200V
C623	1-126-934-11	ELECT	220MF	20%	16V
C624	1-126-767-11	ELECT	1000MF	20%	16V
C625	1-102-074-00	CERAMIC	0.001MF	10%	50V
C627	1-162-116-00	CERAMIC	680PF	10%	2KV
C628	1-102-824-00	CERAMIC	470PF	5%	50V
C630 ⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C631	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C632 ⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C633	1-161-754-00	CERAMIC	0.001MF	10%	3KV
C634	1-102-114-00	CERAMIC	470PF	10%	50V
C801	1-123-024-21	ELECT	33MF		160V
C802	1-107-364-11	MYLAR	0.01MF	10%	200V
C804	1-102-074-00	CERAMIC	0.001MF	10%	50V
C805	1-102-244-00	CERAMIC	220PF	10%	500V
C806	1-126-960-11	ELECT	1MF	20%	50V
C807	1-136-569-11	FILM	1.2MF	5%	200V
C808	1-129-746-00	FILM	0.039MF	5%	400V
C809	1-162-115-00	CERAMIC	330PF	10%	2KV
C810	1-106-365-00	MYLAR	0.0082MF	99%	200V
C811	1-162-318-11	CERAMIC	0.001MF	10%	500V
C812	1-136-081-00	FILM	0.012MF	3%	2KV
C816	1-107-636-11	ELECT	10MF	20%	160V
C820	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C821	1-104-999-11	MYLAR	0.1MF	10%	200V
C822	1-136-111-00	FILM	1MF	5%	200V
C823	1-136-153-00	FILM	0.01MF	5%	50V
C825	1-107-364-11	MYLAR	0.01MF	10%	200V
C850	1-126-941-11	ELECT	470MF	20%	25V
C852	1-104-574-11	CERAMIC	0.0047MF	10%	2KV
C853	1-162-318-11	CERAMIC	0.001MF	10%	500V
C854	1-126-941-11	ELECT	470MF	20%	25V
C856	1-162-318-11	CERAMIC	0.001MF	10%	500V
C857	1-136-159-00	FILM	0.033MF	5%	50V
C860	1-102-228-00	CERAMIC	470PF	10%	500V
C861	1-107-654-11	ELECT	33MF	20%	250V
C875	1-128-562-11	ELECT	47MF	20%	100V
C876	1-107-369-11	MYLAR	0.068MF	10%	100V
C891	1-102-116-00	CERAMIC	680PF	10%	50V
C898	1-137-150-11	MYLAR	0.01MF	10%	100V
C901	1-102-824-00	CERAMIC	470PF	5%	50V
C902	1-102-824-00	CERAMIC	470PF	5%	50V
C1201	1-125-804-51	ELECT	100MF	20%	16V
C1202	1-136-165-00	FILM	0.1MF	5%	50V
C1204	1-125-804-51	ELECT	100MF	20%	16V
C1205	1-136-165-00	FILM	0.1MF	5%	50V
C1210	1-125-804-51	ELECT	100MF	20%	16V
C1213	1-126-960-11	ELECT	1MF	20%	50V
C1214	1-125-797-51	ELECT	10MF	20%	50V
C1217	1-125-804-51	ELECT	100MF	20%	16V
C1218	1-102-976-00	CERAMIC	180PF	5%	50V
C1221	1-136-173-00	FILM	0.47MF	5%	50V
C1226	1-125-806-51	ELECT	220MF	20%	16V
C1228	1-126-960-11	ELECT	1MF	20%	50V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C1229	1-136-173-00	FILM	0.47MF	5%	50V
C1230	1-136-165-00	FILM	0.1MF	5%	50V
C1513	1-126-968-11	ELECT	100MF	20%	50V
		<FILTER>			
CF55	1-567-099-00	FILTER, CERAMIC			
		<CONNECTOR>			
CN101	* 1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN103	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN251	* 1-564-507-11	PLUG, CONNECTOR 4P			
CN601	* 1-580-843-11	PIN, CONNECTOR (POWER)			
CN602	* 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN603	* 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN851	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
		<COMPOSITION CIRCUIT BLOCK>			
CP001	1-233-747-11	CIRCUIT BLOCK, COMPOSITION			
CP002	1-233-749-11	CIRCUIT BLOCK, COMPOSITION			
CP003	1-233-748-11	CIRCUIT BLOCK, COMPOSITION			
CP004	1-233-750-11	CIRCUIT BLOCK, COMPOSITION			
CP005	1-233-749-11	CIRCUIT BLOCK, COMPOSITION			
		<TRIMMER>			
CT55	1-404-801-11	TRAP, CERAMIC			
		<DIODE>			
D001	8-719-109-81	DIODE RD4.7ESB2			
D002	8-719-911-19	DIODE 1SS119-25			
D003	8-719-911-19	DIODE 1SS119-25			
D005	8-719-109-84	DIODE RD5.1ESB1			
D008	8-719-109-89	DIODE RD5.6ESB2			
D103	8-719-016-42	DIODE MC932			
D251	8-719-911-19	DIODE 1SS119-25			
D252	8-719-016-42	DIODE MC932			
D301	8-719-911-19	DIODE 1SS119-25			
D305	8-719-911-19	DIODE 1SS119-25			
D306	8-719-911-19	DIODE 1SS119-25			
D307	8-719-911-19	DIODE 1SS119-25			
D308	8-719-109-54	DIODE RD2.2ESB2			
D310	8-719-911-19	DIODE 1SS119-25			
D311	8-719-109-54	DIODE RD2.2ESB2			
D312	8-719-110-08	DIODE RD8.2ESB2			
D315	8-719-121-24	DIODE RD9.1ESL			
D351	8-719-908-03	DIODE GP08D			
D390	8-719-911-19	DIODE 1SS119-25			
D399	8-719-121-24	DIODE RD9.1ESL			
D403	8-719-911-19	DIODE 1SS119-25			
D513	8-719-109-84	DIODE RD5.1ESB1			
D551	8-719-908-03	DIODE GP08D			
D561	8-719-911-19	DIODE 1SS119-25			
D591	8-719-911-19	DIODE 1SS119-25			

REF.NO.	PART NO.	DESCRIPTION		REMARK
D601	8-719-510-53	DIODE D4SB60L		
D604	8-719-301-64	DIODE RU4DS		
D606	8-719-510-73	DIODE S3L20UF4		
D607	8-719-510-26	DIODE D1NL20-TA		
D609	8-719-510-26	DIODE D1NL20-TA		
D610	8-719-510-26	DIODE D1NL20-TA		
D611	8-719-510-26	DIODE D1NL20-TA		
D801	8-719-945-80	DIODE ERC06-15S		
D802	8-719-900-26	DIODE ERD29-08J		
D851	8-719-302-43	DIODE EL1Z		
D852	8-719-028-72	DIODE RGP02-17EL-6433		
D853	8-719-302-43	DIODE EL1Z		
D855	8-719-302-43	DIODE EL1Z		
D857	8-719-908-03	DIODE GP08D		
D858	8-719-908-03	DIODE GP08D		
D860	8-719-911-19	DIODE 1SS119-25		
D901	8-719-054-60	DIODE LNK0220022G		
D1201	8-719-121-24	DIODE RD9.1ESL		
D1202	8-719-121-24	DIODE RD9.1ESL		
D1207	8-719-121-24	DIODE RD9.1ESL		
D1208	8-719-121-24	DIODE RD9.1ESL		
D1504	8-719-911-19	DIODE 1SS119-25		
D1505	8-719-109-81	DIODE RD4.7ESB2		
		<FUSE>		
F601	⚠ 1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V		
		<FERRITE BEAD>		
FB101	1-410-397-21	FERRITE	1.1UH	
FB102	1-410-397-21	FERRITE	1.1UH	
FB601	1-410-397-21	FERRITE	1.1UH	
FB603	1-410-397-21	FERRITE	1.1UH	
FB610	1-410-397-21	FERRITE	1.1UH	
FB612	1-410-397-21	FERRITE	1.1UH	
FB801	1-410-397-21	FERRITE	1.1UH	
		<CLIP FUSE>		
FH01	1-533-223-11	CLIP, FUSE		
FH02	1-533-223-11	CLIP, FUSE		
		<IC>		
IC001	8-752-889-58	IC CXP85220A-055S		
IC002	8-759-805-37	IC L78LR05D-MA		
IC003	8-759-370-34	IC ST24C08FB6		
IC004	8-742-041-12	HYB IC SBX1981-11(12)		
IC102	8-759-157-40	IC UPC574J		
IC203	8-759-339-60	IC TA8248K		
IC300	8-759-365-26	IC TDA8375A		
IC351	8-759-288-85	IC TDA4665T-T		
IC521	8-759-195-63	IC PQ09RE11		
IC551	8-759-801-98	IC LA7830		
IC601	8-749-014-00	IC STR-S6707N		
IC602	8-749-921-89	IC SE115N		

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The components identified by shading and mark ⚠ are critical for safety.
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REF.NO.	PART NO.	DESCRIPTION		REMARK
IC603 ⚠	8-749-010-64	PHOTO COUPLER PC123F2		
IC801	8-759-145-58	IC UPC4558C		
IC1210	8-759-145-58	IC UPC4558C		
IC1211	8-759-711-23	IC NJM2234L		
		<JACK>		
J251	1-770-785-11	JACK		
J1201	1-770-660-11	JACK BLOCK, PIN 4P		
J1202	1-695-238-11	JACK BLOCK, PIN 2P		
		<COIL>		
L001	1-408-397-00	INDUCTOR	1UH	
L002	1-410-509-51	INDUCTOR	10UH	
L003	1-408-605-31	INDUCTOR	15UH	
L101	1-410-470-11	INDUCTOR	10UH	
L301	1-408-598-31	INDUCTOR	3.9UH	
L401	1-410-498-11	INDUCTOR	1.2UH	
L402	1-410-510-11	INDUCTOR	12UH	
L406	1-410-507-11	INDUCTOR	6.8UH	
L410	1-410-501-51	INDUCTOR	2.2UH	
L802	1-412-527-11	INDUCTOR	15UH	
L804	1-459-075-00	INDUCTOR	0UH	
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY		
L807	1-459-390-00	INDUCTOR	0UH	
L808	1-412-553-11	INDUCTOR	3.3MMH	
L821	1-459-111-00	INDUCTOR	0UH	
L850	1-408-947-00	INDUCTOR	2.2MMH	
		<TRANSISTOR>		
Q030	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q108	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q110	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q207	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q208	8-729-030-02	TRANSISTOR DTC144ESA		
Q210	8-729-029-92	TRANSISTOR DTC143ESA		
Q301	8-729-029-66	TRANSISTOR DTC114ESA		
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q402	8-729-922-66	TRANSISTOR 2SC2410SN		
Q406	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q408	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q409	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q414	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q561	8-729-200-17	TRANSISTOR 2SA1091-R		
Q801	8-729-140-50	TRANSISTOR 2SC3209LK		
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA		
Q821	8-729-209-15	TRANSISTOR 2SD2012		
Q902	8-729-030-02	TRANSISTOR DTC144ESA		
Q903	8-729-030-02	TRANSISTOR DTC144ESA		
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q1202	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q1203	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q1204	8-729-119-76	TRANSISTOR 2SA1175-HFE		

REF.NO.	PART NO.	DESCRIPTION			REMARK
Q1207	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1208	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1209	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1513	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		<RESISTOR>			
R007	1-247-855-31	CARBON	10K	5%	1/4W
R008	1-220-958-81	METAL	1K	5%	1/2W
R010	1-220-958-81	METAL	1K	5%	1/2W
R012	1-249-401-11	CARBON	47	5%	1/4W
R013	1-220-958-81	METAL	1K	5%	1/2W
R015	1-247-825-31	CARBON	560	5%	1/4W
R016	1-220-958-81	METAL	1K	5%	1/2W
R017	1-220-961-81	METAL	2.2K	5%	1/2W
R018	1-249-409-11	CARBON	220	5%	1/4W
R019	1-247-883-00	CARBON	150K	5%	1/4W
R021	1-247-847-31	CARBON	4.7K	5%	1/4W
R025	1-220-961-81	METAL	2.2K	5%	1/2W
R026	1-220-961-81	METAL	2.2K	5%	1/2W
R027	1-247-847-31	CARBON	4.7K	5%	1/4W
R028	1-247-807-31	CARBON	100	5%	1/4W
R029	1-247-847-31	CARBON	4.7K	5%	1/4W
R031	1-220-958-81	METAL	1K	5%	1/2W
R033	1-220-958-81	METAL	1K	5%	1/2W
R035	1-220-958-81	METAL	1K	5%	1/2W
R036	1-220-958-81	METAL	1K	5%	1/2W
R038	1-249-409-11	CARBON	220	5%	1/4W
R040	1-249-409-11	CARBON	220	5%	1/4W
R041	1-247-807-31	CARBON	100	5%	1/4W
R042	1-249-412-11	CARBON	390	5%	1/4W
R045	1-220-961-81	METAL	2.2K	5%	1/2W
R047	1-247-807-31	CARBON	100	5%	1/4W
R048	1-247-807-31	CARBON	100	5%	1/4W
R053	1-220-961-81	METAL	2.2K	5%	1/2W
R054	1-247-855-31	CARBON	10K	5%	1/4W
R057	1-220-958-81	METAL	1K	5%	1/2W
R060	1-249-411-11	CARBON	330	5%	1/4W
R061	1-220-961-81	METAL	2.2K	5%	1/2W
R062	1-220-961-81	METAL	2.2K	5%	1/2W
R063	1-220-961-81	METAL	2.2K	5%	1/2W
R065	1-249-409-11	CARBON	220	5%	1/4W
R066	1-249-409-11	CARBON	220	5%	1/4W
R068	1-247-807-31	CARBON	100	5%	1/4W
R071	1-249-411-11	CARBON	330	5%	1/4W
R076	1-247-807-31	CARBON	100	5%	1/4W
R077	1-247-807-31	CARBON	100	5%	1/4W
R090	1-247-855-31	CARBON	10K	5%	1/4W
R101	1-247-847-31	CARBON	4.7K	5%	1/4W
R102	1-220-958-81	METAL	1K	5%	1/2W
R113	1-249-433-11	CARBON	22K	5%	1/4W
R114	1-247-823-31	CARBON	470	5%	1/4W
R115	1-249-433-11	CARBON	22K	5%	1/4W
R116	1-249-433-11	CARBON	22K	5%	1/4W
R117	1-249-433-11	CARBON	22K	5%	1/4W
R118	1-249-433-11	CARBON	22K	5%	1/4W
R119	1-220-960-81	METAL	1.8K	5%	1/2W

The components identified by shading and mark ⚠ are critical for safety.
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REF.NO.	PART NO.	DESCRIPTION			REMARK	
R120	1-247-891-00	CARBON	330K	5%	1/4W	
R131	1-216-464-11	METAL OXIDE	18K	5%	2W	F
R180	1-249-409-11	CARBON	220	5%	1/4W	
R181	1-249-409-11	CARBON	220	5%	1/4W	
R182	1-249-409-11	CARBON	220	5%	1/4W	
R240	1-247-825-31	CARBON	560	5%	1/4W	
R242	1-247-825-31	CARBON	560	5%	1/4W	
R243	1-247-855-31	CARBON	10K	5%	1/4W	
R244	1-247-855-31	CARBON	10K	5%	1/4W	
R245	1-249-426-11	CARBON	5.6K	5%	1/4W	
R248	1-220-961-81	METAL	2.2K	5%	1/2W	
R250	1-220-961-81	METAL	2.2K	5%	1/2W	
R252	1-249-411-11	CARBON	330	5%	1/4W	
R253	1-247-855-31	CARBON	10K	5%	1/4W	
R254	1-249-389-11	CARBON	4.7	5%	1/4W	
R265	1-247-847-31	CARBON	4.7K	5%	1/4W	
R266	1-249-437-11	CARBON	47K	5%	1/4W	
R303	1-247-807-31	CARBON	100	5%	1/4W	
R304	1-247-807-31	CARBON	100	5%	1/4W	
R305	1-247-807-31	CARBON	100	5%	1/4W	
R306	1-247-807-31	CARBON	100	5%	1/4W	
R307	1-247-807-31	CARBON	100	5%	1/4W	
R308	1-249-409-11	CARBON	220	5%	1/4W	
R309	1-249-409-11	CARBON	220	5%	1/4W	
R310	1-249-441-11	CARBON	100K	5%	1/4W	
R311	1-249-430-11	CARBON	12K	5%	1/4W	
R312	1-247-807-31	CARBON	100	5%	1/4W	
R313	1-220-963-81	METAL	3.3K	5%	1/2W	
R318	1-220-978-81	METAL	120K	5%	1/2W	
R319	1-259-877-11	CARBON	1.2M	5%	1/4W	
R320	1-249-434-11	CARBON	27K	5%	1/4W	
R321	1-215-459-00	METAL	39K	1%	1/4W	
R322	1-249-434-11	CARBON	27K	5%	1/4W	
R326	1-249-424-11	CARBON	3.9K	5%	1/4W	
R330	1-247-825-31	CARBON	560	5%	1/4W	
R331	1-247-897-11	CARBON	560K	5%	1/4W	
R332	1-249-409-11	CARBON	220	5%	1/4W	
R333	1-249-431-11	CARBON	15K	5%	1/4W	
R335	1-247-855-31	CARBON	10K	5%	1/4W	
R336	1-220-961-81	METAL	2.2K	5%	1/2W	
R339	1-215-408-00	METAL	300	1%	1/4W	
R340	1-249-411-11	CARBON	330	5%	1/4W	
R341	1-220-958-81	METAL	1K	5%	1/2W	
R344	1-259-880-11	CARBON	2.2M	5%	1/4W	
R351	1-249-393-11	CARBON	10	5%	1/4W	
R355	1-249-393-11	CARBON	10	5%	1/4W	
R356	1-220-958-81	METAL	1K	5%	1/2W	
R360	1-259-884-11	CARBON	4.7M	5%	1/4W	
R403	1-220-946-81	METAL	68	5%	1/2W	
R406	1-247-847-31	CARBON	4.7K	5%	1/4W	
R407	1-249-424-11	CARBON	3.9K	5%	1/4W	
R408	1-220-960-81	METAL	1.8K	5%	1/2W	
R409	1-247-807-31	CARBON	100	5%	1/4W	
R414	1-247-823-31	CARBON	470	5%	1/4W	
R416	1-249-409-11	CARBON	220	5%	1/4W	
R419	1-220-958-81	METAL	1K	5%	1/2W	
R420	1-249-412-11	CARBON	390	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R421	1-249-409-11	CARBON	220	5%	1/4W	
R424	1-220-961-81	METAL	2.2K	5%	1/2W	
R425	1-249-412-11	CARBON	390	5%	1/4W	
R426	1-249-407-11	CARBON	150	5%	1/4W	
R429	1-249-412-11	CARBON	390	5%	1/4W	
R433	1-249-433-11	CARBON	22K	5%	1/4W	
R434	1-247-823-31	CARBON	470	5%	1/4W	
R438	1-247-823-31	CARBON	470	5%	1/4W	
R440	1-249-407-11	CARBON	150	5%	1/4W	
R521	1-249-417-11	CARBON	1K	5%	1/4W	
R552	1-247-883-00	CARBON	150K	5%	1/4W	
R553	1-249-433-11	CARBON	22K	5%	1/4W	
R554	1-102-074-00	CERAMIC	0.001MF	10%	50V	
R555	1-247-855-31	CARBON	10K	5%	1/4W	
R556	1-249-417-11	CARBON	1K	5%	1/4W	
R557	1-249-420-11	CARBON	1.8K	5%	1/4W	
R561	1-247-839-31	CARBON	2.2K	5%	1/4W	
R562	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R563	1-260-126-11	CARBON	180K	5%	1/2W	
R564	1-249-438-11	CARBON	56K	5%	1/4W	
R565	1-249-438-11	CARBON	56K	5%	1/4W	
R566	1-247-847-31	CARBON	4.7K	5%	1/4W	
R569	1-260-354-71	CARBON	150K	5%	1/2W	
R571	1-249-409-11	CARBON	220	5%	1/4W	
R601	1-202-961-11	CEMENTED	1.8	5%	10W	
R602	1-202-961-11	CEMENTED	1.8	5%	10W	
R606	1-215-915-11	METAL OXIDE	470	5%	3W	F
R610	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R613	1-219-134-11	FUSIBLE	0.1	10%	1/4W	
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R616 ⚠	1-247-289-11	CARBON	8.2M	5%	1W	
R617	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R619	1-219-134-11	FUSIBLE	0.1	10%	1/4W	
R622	1-217-192-21	METAL	0.22	10%	2W	
R623	1-247-807-31	CARBON	100	5%	1/4W	
R624	1-216-446-00	METAL OXIDE	18	5%	2W	F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W	
R626	1-249-420-11	CARBON	1.8K	5%	1/4W	
R627	1-249-417-11	CARBON	1K	5%	1/4W	
R628	1-249-417-11	CARBON	1K	5%	1/4W	
R629	1-249-399-11	CARBON	33	5%	1/4W	
R632	1-249-381-11	CARBON	1	5%	1/4W	
R636	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W	F
R802	1-249-385-11	CARBON	2.2	5%	1/4W	F
R803	1-247-839-31	CARBON	2.2K	5%	1/4W	
R804	1-249-417-11	CARBON	1K	5%	1/4W	
R805	1-249-433-11	CARBON	22K	5%	1/4W	
R809	1-247-756-11	CARBON	2.2K	5%	1/2W	F
R811	1-216-343-00	METAL OXIDE	0.33	5%	1W	F
R812	1-215-447-00	METAL	12K	1%	1/4W	
R816	1-249-435-11	CARBON	33K	5%	1/4W	
R820	1-249-419-11	CARBON	1.5K	5%	1/4W	
R821	1-215-911-11	METAL OXIDE	100	5%	3W	F
R822	1-216-429-00	METAL OXIDE	270	5%	1W	F

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK	
R823	1-249-931-11	CARBON	2.2K	5%	1/4W	F
R825	1-249-392-11	CARBON	8.2	5%	1/4W	F
R826	1-249-422-11	CARBON	2.7K	5%	1/4W	
R827	1-249-440-11	CARBON	8.2K	5%	1/4W	
R828	1-249-424-11	CARBON	3.9K	5%	1/4W	
R829	1-249-419-11	CARBON	1.5K	5%	1/4W	
R831	1-215-863-11	METAL OXIDE	100	5%	1W	F
R832	1-247-839-31	CARBON	2.2K	5%	1/4W	
R834	1-247-855-31	CARBON	10K	5%	1/4W	
R851	1-249-382-11	CARBON	1.2	5%	1/4W	F
R852	1-249-923-11	CARBON	1K	5%	1/4W	F
R853	1-249-377-11	CARBON	0.47	5%	1/4W	F
R854	1-249-377-11	CARBON	0.47	5%	1/4W	F
R855	1-202-818-00	SOLID	1K	20%	1/2W	
R856	1-247-855-31	CARBON	10K	5%	1/4W	
R857	1-249-438-11	CARBON	56K	5%	1/4W	
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R860	1-247-887-00	CARBON	220K	5%	1/4W	
R881	1-247-825-31	CARBON	560	5%	1/4W	
R882	1-249-422-11	CARBON	2.7K	5%	1/4W	
R883	1-247-903-00	CARBON	1M	5%	1/4W	
R895	1-216-349-00	METAL OXIDE	1	5%	1W	F
R898	1-247-839-31	CARBON	2.2K	5%	1/4W	
R902	1-247-847-31	CARBON	4.7K	5%	1/4W	
R904	1-247-847-31	CARBON	4.7K	5%	1/4W	
R905	1-220-958-81	METAL	1K	5%	1/2W	
R906	1-220-958-81	METAL	1K	5%	1/2W	
R907	1-220-960-81	METAL	1.8K	5%	1/2W	
R908	1-220-960-81	METAL	1.8K	5%	1/2W	
R909	1-220-963-81	METAL	3.3K	5%	1/2W	
R910	1-220-963-81	METAL	3.3K	5%	1/2W	
R911	1-249-428-11	CARBON	8.2K	5%	1/4W	
R913	1-247-823-31	CARBON	470	5%	1/4W	
R914	1-247-823-31	CARBON	470	5%	1/4W	
R915	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1201	1-249-404-00	CARBON	8.2	5%	1/4W	
R1202	1-220-958-81	METAL	1K	5%	1/2W	
R1203	1-249-437-11	CARBON	47K	5%	1/4W	
R1205	1-249-404-00	CARBON	8.2	5%	1/4W	
R1206	1-249-437-11	CARBON	47K	5%	1/4W	
R1211	1-220-946-81	METAL	68	5%	1/2W	
R1212	1-220-958-81	METAL	1K	5%	1/2W	
R1215	1-247-895-00	CARBON	470K	5%	1/4W	
R1216	1-247-895-00	CARBON	470K	5%	1/4W	
R1217	1-247-823-31	CARBON	470	5%	1/4W	
R1219	1-247-855-31	CARBON	10K	5%	1/4W	
R1220	1-220-958-81	METAL	1K	5%	1/2W	
R1221	1-247-855-31	CARBON	10K	5%	1/4W	
R1227	1-220-964-81	METAL	39K	5%	1/2W	
R1228	1-220-958-81	METAL	1K	5%	1/2W	
R1229	1-247-823-31	CARBON	470	5%	1/4W	
R1230	1-247-855-31	CARBON	10K	5%	1/4W	
R1231	1-220-958-81	METAL	1K	5%	1/2W	
R1232	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1233	1-220-961-81	METAL	2.2K	5%	1/2W	
R1235	1-220-964-81	METAL	39K	5%	1/2W	
R1239	1-249-389-11	CARBON	4.7	5%	1/4W	F

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1240	1-247-807-31	CARBON	100	5%	1/4W
R1241	1-220-958-81	METAL	1K	5%	1/2W
R1243	1-247-807-31	CARBON	100	5%	1/4W
R1246	1-249-411-11	CARBON	330	5%	1/4W
R1247	1-247-823-31	CARBON	470	5%	1/4W
R1248	1-220-958-81	METAL	1K	5%	1/2W
R1249	1-247-823-31	CARBON	470	5%	1/4W
R1250	1-247-901-11	CARBON	8.2K	5%	1/4W
R1251	1-247-901-11	CARBON	8.2K	5%	1/4W
R1252	1-220-961-81	METAL	2.2K	5%	1/2W
R1253	1-249-418-11	CARBON	1.2K	5%	1/4W
R1255	1-247-855-31	CARBON	10K	5%	1/4W
R1513	1-247-855-31	CARBON	10K	5%	1/4W
R1514	1-247-847-31	CARBON	4.7K	5%	1/4W
R1515	1-247-807-31	CARBON	100	5%	1/4W
		<SWITCH>			
S601 ⚠	1-571-433-31	SWITCH, PUSH (AC POWER)			
S801	1-572-707-11	SWITCH, LEVER			
S901	1-570-577-41	SWITCH, PUSH			
S902	1-570-577-41	SWITCH, PUSH			
S903	1-570-577-41	SWITCH, PUSH			
S904	1-570-577-41	SWITCH, PUSH			
S905	1-570-577-41	SWITCH, PUSH			
		<SPARK GAP>			
SG801	1-519-422-11	GAP, SPARK			
		<SURFACE WAVE FILTER>			
SWF401	1-577-169-12	SAWF			
		<TRANSFORMER>			
T601 ⚠	1-431-824-11	TRANSFORMER, CONVERTER (SRT)			
T605 ⚠	1-424-682-11	TRANSFORMER, LINE FILTER			
T801	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T851 ⚠	1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)			
		<THERMISTOR>			
THP601 ⚠	1-808-059-32	THERMISTOR, POSITIVE			
		<TUNER>			
TU101	8-598-323-30	TUNER, VSS BT-AG401			
		<CRYSTAL>			
X101	1-577-082-11	VIBRATOR, CERAMIC			
X300	1-411-752-11	COIL			
X358	1-567-505-11	OSCILLATOR, CRYSTAL			
X443	1-567-504-11	OSCILLATOR, CRYSTAL			

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The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

C

REF.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1331-800-A	C BOARD, COMPLETE			
		*********************			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C701	1-162-114-00	CERAMIC	0.0047MF		2KV
C702	1-102-074-00	CERAMIC	0.001MF	10%	50V
C703	1-107-651-11	ELECT	4.7MF	20%	250V
C704	1-130-202-00	FILM	0.022MF	5%	400V
C708	1-102-114-00	CERAMIC	470PF	10%	50V
C709	1-102-114-00	CERAMIC	470PF	10%	50V
C710	1-102-114-00	CERAMIC	470PF	10%	50V
C712	1-102-115-00	CERAMIC	560PF	10%	50V
C713	1-102-115-00	CERAMIC	560PF	10%	50V
C714	1-102-115-00	CERAMIC	560PF	10%	50V
C716	1-124-122-11	ELECT	100MF	20%	50V
C736	1-102-114-00	CERAMIC	470PF	10%	50V
C737	1-102-114-00	CERAMIC	470PF	10%	50V
C746	1-102-114-00	CERAMIC	470PF	10%	50V
		<CONNECTOR>			
CN701	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN704	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D701	8-719-911-19	DIODE 1SS119-25			
D702	8-719-911-19	DIODE 1SS119-25			
D703	8-719-911-19	DIODE 1SS119-25			
D707	8-719-911-19	DIODE 1SS119-25			
D708	8-719-911-19	DIODE 1SS119-25			
D709	8-719-911-19	DIODE 1SS119-25			
D710	8-719-911-19	DIODE 1SS119-25			
D711	8-719-911-19	DIODE 1SS119-25			
D712	8-719-911-19	DIODE 1SS119-25			
D716	8-719-911-19	DIODE 1SS119-25			
D717	8-719-121-24	DIODE RD9.1ESL			
		<JACK>			
J701	⚠ 1-251-239-11	SOCKET, CRT			
		<COIL>			
L701	1-410-667-31	INDUCTOR	22UH		
		<TRANSISTOR>			
Q704	8-729-326-11	TRANSISTOR 2SC2611			
Q705	8-729-326-11	TRANSISTOR 2SC2611			
Q706	8-729-326-11	TRANSISTOR 2SC2611			
Q707	8-729-200-17	TRANSISTOR 2SA1091-O			
Q708	8-729-200-17	TRANSISTOR 2SA1091-O			

REF.NO.	PART NO.	DESCRIPTION			REMARK	
Q709	8-729-200-17	TRANSISTOR 2SA1091-O				
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R702	1-244-941-00	CARBON	680K	5%	1/2W	
R703	1-249-496-11	CARBON	100K	5%	1/2W	
R705	1-216-393-00	METAL OXIDE	2.2	5%	3W	F
R710	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R711	1-247-763-11	CARBON	8.2K	5%	1/2W	
R712	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R713	1-247-763-11	CARBON	8.2K	5%	1/2W	
R714	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R715	1-247-763-11	CARBON	8.2K	5%	1/2W	
R719	1-215-480-00	METAL	300K	1%	1/4W	
R720	1-249-923-11	CARBON	1K	5%	1/4W	F
R721	1-215-489-00	METAL	680K	1%	1/4W	
R722	1-249-923-11	CARBON	1K	5%	1/4W	F
R723	1-215-479-00	METAL	270K	1%	1/4W	
R724	1-249-923-11	CARBON	1K	5%	1/4W	F
R725	1-220-959-81	METAL	1.5K	5%	1/2W	
R726	1-220-959-81	METAL	1.5K	5%	1/2W	
R727	1-220-959-81	METAL	1.5K	5%	1/2W	
R728	1-249-407-11	CARBON	150	5%	1/4W	
R729	1-249-408-11	CARBON	180	5%	1/4W	
R730	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-247-807-31	CARBON	100	5%	1/4W	
R732	1-247-807-31	CARBON	100	5%	1/4W	
R733	1-247-807-31	CARBON	100	5%	1/4W	
R734	1-247-739-11	CARBON	100	5%	1/2W	
R738	1-247-807-31	CARBON	100	5%	1/4W	
R739	1-247-807-31	CARBON	100	5%	1/4W	
R740	1-247-807-31	CARBON	100	5%	1/4W	
R755	1-249-418-11	CARBON	1.2K	5%	1/4W	
R756	1-249-418-11	CARBON	1.2K	5%	1/4W	
R757	1-249-418-11	CARBON	1.2K	5%	1/4W	
		<VARIABLE RESISTOR>				
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M				

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		*****************	
⚠	1-416-284-11	COIL, DEMAGNETIC	
	1-452-032-00	MAGNET,DISC	
	1-452-277-00	MAGNET, BMC	
	1-505-662-11	SPEAKER (5X12CM)	
⚠	1-782-452-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V	
⚠	1-900-700-05	LEAD ASSY, FOCUS	
	8-451-280-33	DEFLECTION YOKE (Y21PXA2)	
⚠	8-738-774-05	PICTURE TUBE (A51JUH71X)	

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ACCESSORIES AND PACKING MATERIALS
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REF.NO.	PART NO.	DESCRIPTION	REMARK
	3-701-910-00	SCREW, SPECIAL (DIA. 3.8X20)	
	3-862-582-11	MANUAL, INSTRUCTION	
*	4-053-003-01	BAG, PROTECTION	
*	4-063-084-01	CUSHION (UPPER) (ASSY)	
*	4-063-085-01	CUSHION (LOWER) (ASSY)	
*	4-063-090-01	INDIVIDUAL CARTON	
	4-392-003-31	BAND, HOLD	
	4-392-004-21	CLIP	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		REMOTE COMMANDER	
		**********************	
	1-475-800-11	REMOTE COMMANDER (RM-883)	

Sony Corporation
Display Company
TV Display Business Asia

9-965-686-01

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